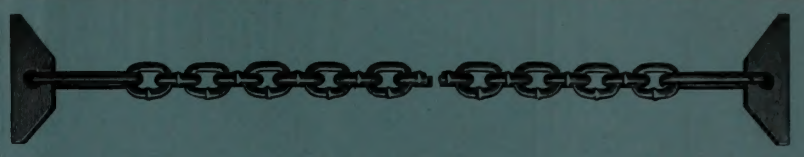
Canada Lumberman & Woodworker

New **RAILS** Raying
12 to 80 pounds per yd.
LOGGING CRS
Jno. J. Gartsbre
58 Front St. West, Tonto



Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.

YOU CAN SA 15 TO 50% POWER COST

in your exhaust systems conveying and removing Shavings, Sawdust, Bark, etc., by using

Canan Slow Speed Mill Exhausters

Facts are facts. Ask ters—and there are hundreds of them—what they think of the investment. Then yo use a "Canadian" on your next job.

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BERLIN, ONTARIO
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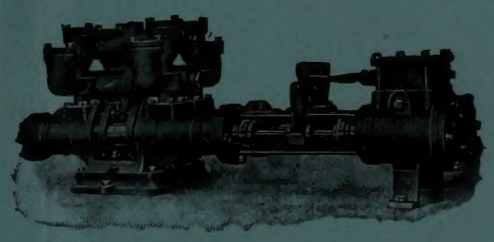
Blast Wheel for stringy material.

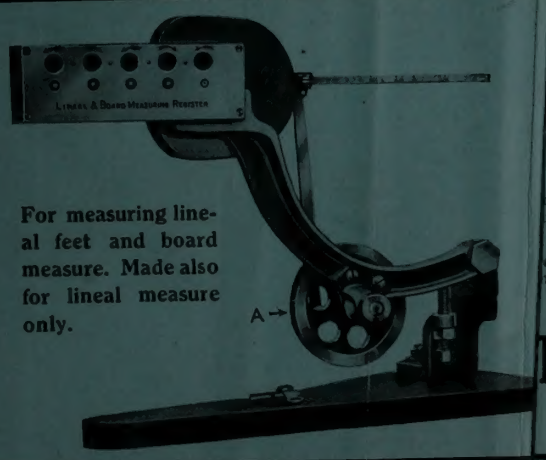
GENUINE "TURBR"
Balata Be ing
Waterproof and Stretchless.
The best belt fo mills.
Manufactured and guaranteed
Turner Bros. Canad Limited
Montreal — Vancouv



Have You Seen It?

If you have not received a copy of our new Pump Bulletin, send us your address, as we would like you to see it. We know you will be interested.

The Smart-Turner Machine Co., Limited
HAMILTON, CANADA



For measuring lineal feet and board measure. Made also for lineal measure only.

Increase the efficiency in your mill—Reduce your lumber handling costs—and lessen the labor of your men by installing a

Morrison Lumber Measuring Register

This register can be attached to your planer, moulder, resaw, matcher, your sorting table, or any other place ou require. It will automatically and continuously measure your stock, giving the result in lineal or board mea- ure as desired. It can be used for either tallying small orders or for totalling the day's run.

The Morrison Register can be used in the sawmill, planing mill, furniture factory, woodworking plant or lum- er yard. This register is solidly constructed and guaranteed accurate. Used by many of the largest concerns in he country. Sent on trial to any reputable firm.

WRITE US FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertise age 66 Classified Directory to Advertisements, Page 56

"Leather like gold has no sistitute."

A Good Belt
Means
An Efficient Plant

The belting in any saw mill, planing or woodworking plant is the very foundation of that plant's efficiency. By using the *best* oak tanned waterproof leather belting, "AMPHIBIA" by name, these gains are made. Your power is transmitted, without loss by slipping, to every machine. The machines are working at full capacity and therefore you get the most out of your men. The surface of "AMPHIBIA" belting grips the pulleys allowing the belting to run loosely and save the bearings.

"AMPHIBIA" belting is "Made in Canada."

When ordering state where the belt is to run

We have been making the best leather belts 39 years.

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Send us your inquiries for Dimension Timber, Deals, Rough and Dressed Lumber in all sizes and grades.

With a daily capacity of 200,000 feet of Lumber, and 90,000 pieces of Lath we can fill your orders promptly.

George Gordon & Co.

Limited

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CALIFORNIA REDWOOD

REDWOOD

CALIFORNIA REDWOOD

our big specialty. The versatile wood. You have read our previous messages and know what this wonderful and economical wood is.

BIG TIMBERS

our hobby. The bigger the better.

RAILWAY TIES

our big line and everything in lumber. Second to none.

TRY OUR QUALITY GOODS AND EFFICIENT SERVICE.

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Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

Longford Hemlock

The genuine stock, we are now offering to you

Look at the sizes listed below—surely you can make up an order out of same.

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55,000—1-in. Sidings
14,000—1 x 4.
48,000—1 x 6.
23,000—1 x 7.
10,000—1 x 10.
16,000—2 x 4— 9.
48,000—2 x 4—10.
42,000—2 x 4—12.
50,000—2 x 4—14.
40,000—2 x 4—16.
21,000—2 x 6—10.
28,000—2 x 6—12.
33,000—2 x 6—14.
27,000—2 x 6—16.

1915 CUT—No. 1

8,000—2 x 8—10.
23,000—2 x 8—12.
40,000—2 x 8—14.
39,000—2 x 8—16.
19,000—2 x 10—10.
44,000—2 x 10—12.
82,000—2 x 10—14.
87,000—2 x 10—16.

1914 CUT

255,000 1 in. No. 2.
308,000 2 in. No. 2.
228,000 2 x 4 No. 2.

Send us your inquiries.

The Long Lumber Company

HAMILTON, ONT.

Collar The Trade with Hocken's Hemlock

You will have no difficulty in securing your share of trade if you sell such excellent stock as Hocken's Hemlock.

Ask for our prices.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

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Watson & Todd Limited

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Dry White Pine and Norway

OTTAWA

Also

Montreal and Liverpool, Eng.

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Harris Tie & Timber Co.

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Lumber - Lath - Shingles

Cedar Poles and Posts

Railway Ties - - Piles

The

Georgian Bay Lumber Co.

Limited

Waubaushene, Ontario

Manufacturers of High Grade

Lumber and Laths

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Wholesale Lumber Dealers and Selling Agents for

Fraser & Co.

Mills at

DESCHENES - - - QUEBEC

White Pine
Red Pine
Spruce
Lumber and Lath

GILLIES BROS., Limited

BRAESIDE, ONTARIO

WHITE PINE RED PINE SPRUCE

WE OFFER DRY STOCK FOR PROMPT SHIPMENT.

Spruce—Log Run

(Mill Culls Out)

5/4 x 4/5 x 10/16	1,000	8/4 x 7 x 17/22	500
8/4 x 6 x 10/16	25,000	8/4 x 8 x 17/22	18,000
8/4 x 7 x 10/16	5,000	8/4 x 9 x 17/22	1,500
8/4 x 8 x 10/16	70,000	8/4 x 10 x 17/22	25,000
8/4 x 9 x 10/16	60,000	8/4 x 12 x 17/22	4,500
8/4 x 10 x 10/16	30,000		
8/4 x 12 x 10/16	55,000	(The 8/4 is sawn the Eastern scant thickness).	
8/4 x 6 x 17/22	5,000		

Spruce—Culls

4/4 x 4 and up x 6/16	450,000
5/4 x 4 and up x 6/16	600,000
8/4 x 4 and up x 6/22	50,000

Tamarac—Log Run

4/4 x 4 and up x 6/16	60,000
5/4 x 4 and up x 6/16	4,000
3 x 4 and up x 6/16	2,000

BARTRAM BROTHERS, LIMITED
OTTAWA, CANADA

Spruce
Red Pine
White Pine

Large stock dry 1" and 2"

Have large stock 3" Spruce Deals for export trade at water points and can make delivery.

Special, 400,000 ft. dry 6/4 Canadian Birch

Hemlock
White Pine
White Oak
Red Oak
White Ash
Birch
Maple
Beech
Rock Elm
Soft Elm
Red Gumwood
Yellow Pine
Basswood
Spruce
Cedar

Three Sawmills and large, well-equipped Planing Mill, including Sash and Door Factory, with special machinery for the manufacture of Oak, Birch and Maple Flooring.

We supply Timbers, Track Ties, Cedar Posts, Lath, Shingles.

Try us once.

John Harrison & Sons Co.
Limited
Owen Sound, Ont.

J H & S Co

P. & J. SHANNON
Manufacturers of
White and Norway Pine Lumber
Lath, Etc.

Inquiries solicited for 1915 cut. Mill and equipment new in 1914.

Head Office and Mill:—**Biscotasing, Ont.**

River Ouelle Pulp & Lumber Co.

Manufacturers of

SPRUCE

Lumber Lath Pulpwood

Head Office and Mills at:

St. Pacome, Que., Canada
On I. C. Ry. 75 Miles East of Quebec City

Also Mills at:

Crown Lake, Powerville, Riv. Manie
On Nat. Transcontinental Ry.

Thos. Mackarell & Company

Ottawa - - - Montreal

Wholesale

Red Pine White Pine Spruce

Charlemagne & Lac Ouareau Lumber Co.
Mills: Charlemagne, Montcalm, St. Adele

The Gres Falls Company
Mills: Three Rivers and Cape Madelaine

St. Gabriel Lumber Co., Limited
Mill: St. Gabriel de Brandon
Head Office: 524 Board of Trade, Montreal, P. Q.

Manufacturers of
Spruce and Pine Lumber and Ground Wood Pulp

Fraser Limited
Fredericton, N. B.

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Cabano, P. Q.

Fraser Lumber Co., Limited
Plaster Rock, N. B.

F & M Lumber Co., Limited
Whitworth, P. Q.

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Spruce Lumber
Rough and Finished

Shingles, Lath, Piano Sounding Board Stock, etc.

California PTXLC Redwood

For Interior Finish
Redwood is easy to work and takes a beautiful finish.

For Exterior Finish
Redwood leads for it does not rot. It needs no paint.

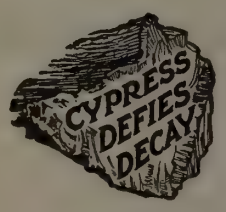
Ask for our Catalogue. Ask for our Finish Book.

John D. Mershon Lumber Company
Saginaw, Mich. — New York 1 Madison Ave. — Chicago 3612 S. Morgan St.

Our Mills Produce and We Market as Much

GENUINE LOUISIANA RED CYPRESS

As All Other Concerns Combined



250,000,000 feet constantly in stock insures filling any reasonable order promptly.
Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

Our salaried salesmen receive credit for mail orders. Try us.

LOUISIANA RED CYPRESS COMPANY

Hibernia Building — New Orleans, La.

White Cedar Shingles

Our Mills have now started and we can ship promptly White Cedar Shingles in all grades.

Association Grading Rules produce high grade stock that commands top prices in all Markets, still the price is no higher at our Mills than you are now paying.

Uniform Prices at all Shipping Points with same terms to all buyers.

We are now shipping from following rail points:

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CHARLO, N. B.
BATHURST, N. B.
CHATHAM, N. B.

Water Shipments from:

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Dalhousie, N.B. Bathurst, N.B. Chatham, N.B.

OUR MOTTO:

PROMPT SHIPMENT, SATISFACTORY STOCK, GOOD SERVICE.

The North Shore Shingle Association

of Eastern Canada

For Prices write or wire

F. G. WHEATON, Amherst, N.S.

Canadian Sales Agent

JOHN MCKERGOW, President W. K. GRAFFTEY, Managing-Director

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13 Foot **SPRUCE** 16 Foot
Lath and White Cedar Shingles

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Grant & Campbell

Manufacturers of
SPRUCE, HEMLOCK TIMBERS AND PILING AND LATH

Prices promptly given on all enquiries.

New Glasgow, N.S.

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HARDWOOD LUMBER
Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
PHONE 37 RESIDENCE 15
JOHN P. NEWMAN Wiarton, Ont.

HAEBERLE LUMBER CO.
LUMBER AND TIMBER
White Pine, Norway, Yellow Pine, Hemlock
Oak Mouldings, Doors, Sashes and Blinds, Cedar Poles and Ties.
Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
NIAGARA FALLS, N.Y.

Hardwood Flooring
The Celebrated Diamond Brand
End Matched, Bored, Polished and Bundled
Manufactured by
SIEMON BROS., LTD.
For prices write
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Good Grades **Right Prices** **Prompt Shipments**

Canadian Hardwood. National Grading Rules

Birch
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Maple
Elm
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All Thicknesses

Also full line in

White, Red
and
Jack Pine

All grades and sizes.

Get in touch with us for prices

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Manufacturers and Strictly Wholesale Dealers in Lumber

206 Manning Chambers
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WE Buy, Sell and deal in all kinds of Lumber and Timber in Canada and United States: Spruce, White Pine, White and Basswood, Ash, Cedar, Douglas Fir, Beech, Birch, Walnut, Cherry, Chestnut, Cottonwood, Hemlock, Maple, Norway Pine, Short and Long Leaf Yellow Pine, Oak, Redwood, Birch, Maple and Oak Flooring, Pulpwood Ties, and Cedar Poles.

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QUEBEC

The Canada Wood Specialty Co., Limited
Manufacturers:
Lumber, Hardwood Flooring, Handles, Poles, Bed Frame Stock, Cheese Box Hoops, Heading, Baskets, Etc.
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Dressing of wood in transit on the Intercolonial Railway.

SPECIALTIES
Sawed Hemlock
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Pine and Hardwood
Lumber
Lath and Shingles

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Technical Training Thoroughness Experience

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The Penetanguishene Planing Mill Sash and Door Factory

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Spruce, Hemlock, Pine and Hardwoods

Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.

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Do you know the worth of your Timber Lands?

My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,

Whether you want to buy, bond or sell I can be of service to you.

F. R. MEIER
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Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna, Forest Commission, etc.

"Well Bought is Half Sold"

We Offer the Following Special Lines—

For Quick Sale

2 Cars	4 x 4 to 6 x 6	Sound Cedar Squares
100,000 Ft.	5/4	1st and 2nd Basswood
2,500 "	8/4	" " "
2,500 "	16/4	" " "
12,000 "	8/4	1st and 2nd Soft Elm
17,000 "	4/4	No. 1 C. & B. Soft Elm
22,000 "	8/4	No. 1 C. & B. Soft Elm
50,000 "	4/4	No. 2 C. & B. Birch
13,000 "	3 x 8 to 16"—10 to 16 ft.	1st and 2nd White Ash
13,000 "	2 x 6 and up—10 to 16 ft.	No. 1 C. & B. White Ash

Hardwoods Thoroughly Dry
Your Inquiries Will Have Prompt Attention

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MANUFACTURERS OF

Pine and Hemlock Lumber

1026-32 Traders Bank Bldg, Toronto, Ont.

Mills: Byng Inlet, Ont.

We are Buyers of

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Veneers (3 or more ply) Handles (all descriptions)

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Hydraulic and Screw for
VENEER
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Special machinery made to order

WILLIAM R. PERRIN
TORONTO, CANADA Limited

Order To - Day we Ship Tomorrow

Gulf Cypress

Kiln - dried North Carolina Pine, Long Leaf Timber, Whitewood, Cypress Shingles.

From our wharves in Portland, Maine

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OAK FIR WHITE PINE

Specialty --- Dimension Timber

HEMLOCK YELLOW PINE NORWAY PINE

Lumber
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Shingles

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MILLS AT - - BARNET, B.C.

TIES
POLES
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Wholesale
Lumber, Shingles and Lath

British Columbia Douglas Fir Dressed or Rough, Flooring, Ceiling, Siding of the finest quality at close prices.

RED CEDAR SHINGLES OF HIGH GRADE

Quality our Watchword.

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HEMLOCK SPRUCE

Dry stock in all sizes. *Quick shipments.*

1205 TRADERS BANK BUILDING, TORONTO

We Offer for Immediate Shipment

50 M. ft. 4/4 No. 1 Common and Better Elm.
32 M. ft. 8/4 No. 1 Common and Better Elm.
7 M. ft. 12/4 No. 1 Common and Better Elm.
70 M. ft. 4/4 No. 2 Common and Better Maple.
26 M. ft. 8/4 No. 2 Common and Better Maple.
40 M. ft. 4/4 No. 1 Common and Better Birch.
26 M. ft. 8/4 No. 1 Common and Better Birch.
40 M. ft. 4/4 Mill Cull Elm.

ARTHUR N. DUDLEY

Lumber, Lath and Shingles

109 Stair Building Toronto Phone M 6368

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock—
heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder

501 Kent Bldg.
Toronto, Ont.

F. N. WALDIE, President. R. S. WALDIE, Vice President. W. E. HARPER, Secretary.

The Victoria Harbor Lumber Co., Ltd.

Manufacturers of

Lumber, Lath and Shingles

Mills at Victoria Harbor, Ont.

HEAD OFFICE,
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United States Manufacturers and Wholesalers seeking Canadian Business

Hoffman Brothers Company

Fort Wayne, Indiana

Manufacturers of Hardwoods—Any Thickness From

1/30″ SLICE CUT VENEER
1/20″ SAWED VENEER
to
2″ BAND SAWED LUMBER

Reg U.S. Pat. Off.

Specialty:

QUARTERED WHITE OAK

LOUISIANA RED CYPRESS

QUARTERED OAK PLAIN OAK
POPLAR ASH

Yards at Nashville, Tenn.

We can ship you promptly any of the above Stock, Carefully Inspected

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Canadian Representative:
Mr. Gilbert B. Woodhull, Box 54, Toronto, Ont.

Plant of The Stearns Salt and Lumber Co.

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Michigan Hardwoods
Hemlock and Pine

Lumber and Timber

Try out STEARNS SERVICE on mixed car shipments. Retail stocks replenished over night by our 24 hour service.

HEMLOCK
WHITE PINE
HARDWOODS
MAPLE FL'G.
} *IN MIXED CARS* {
SHINGLES
LATH
POSTS
MOULDING

The
Stearns Salt & Lumber Co.
Ludington, Mich.

W. M. RITTER LUMBER COMPANY

Below is List of Dry Lumber We Can Ship Promptly

CHESTNUT:
4/4 1s and 2s, 2 cars.
5/4 1s and 2s, 3 cars.
6/4 1s and 2s, 3 cars.
8/4 1s and 2s, 1 car.
4/4 No. 1 Common, 3 cars.
5/4 No. 1 Common, 1 car.
6/4 No. 1 Common, 2 cars.
8/4 No. 1 Common, 2 cars.
4/4 Sound Wormy, 3 cars.
5/4 Sound Wormy, 2 cars
8/4 Sound Wormy, 1 car.

POPLAR:
5/8 Reg. 1s and 2s, three cars.
3/4 Reg. 1s and 2s, one car.
4/4 Reg. 1s and 2s, four cars.
5/4 Reg. 1s and 2s, one car.
6/4 Reg. 1s and 2s, one car.
10/4 Reg. 1s and 2s, one car.
12/4 Reg. 1s and 2s, two cars.
16/4 Reg. 1s and 2s, three cars
4/4 No. 1 Common, 4 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 2 cars.
5/8 18-23, two cars, Panel and No. 1.
4/4 24-27, three cars, Panel and No. 1.
4/4 18 23, two cars, Panel and No. 1.

BASSWOOD:
4/4 1s and 2s, 5 cars.
5/4 1s and 2s, 3 cars.
4/4 No. 1 Common, 5 cars.
5/4 No. 1 Common, 3 cars.

WHITE OAK:
5/4 1s and 2s Plain, 5 cars.
6/4 1s and 2s Plain, 6 cars.
7/4 1s and 2s Plain, 7 cars.
8/4 1s and 2s Plain, 7 cars.
5/4 No. 1 Common, 3 cars.
6/4 No. 1 Common, 3 cars.
4/4 Qtd. 1s and 2s, 4 cars.
4/4 No. 1 Common, 5 cars.

PLAIN RED OAK:
4/4 1s and 2s, 7 cars.
5/4 1s and 2s, 3 cars.
6/4 1s and 2s, 3 cars.
8/4 1s and 2s, 1 car.
4/4 No. 1 Common, 6 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 3 cars.

The above is a list of dry stock which we can ship promptly. All our own manufacture and band-sawn stock, and thoroughly dry. Do not place your orders before writing for prices.

CANADIAN REPRESENTATIVE:

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Phone College 6997

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COLUMBUS, OHIO

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Michigan Hardwoods AND Hemlock Lumber

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Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - **Western Office:—Pacific Building, VANCOUVER, B. C.**

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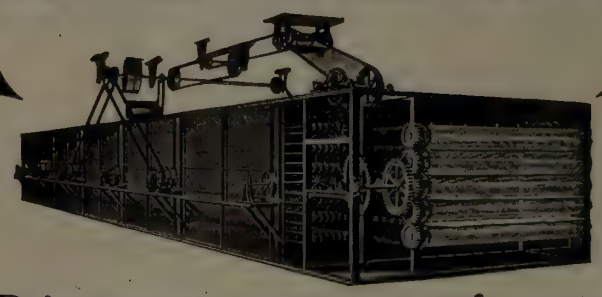

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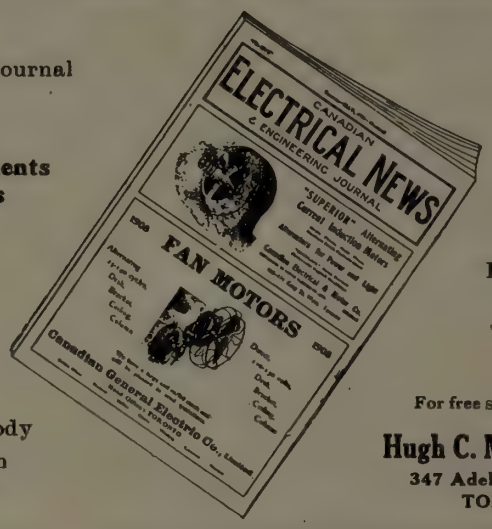

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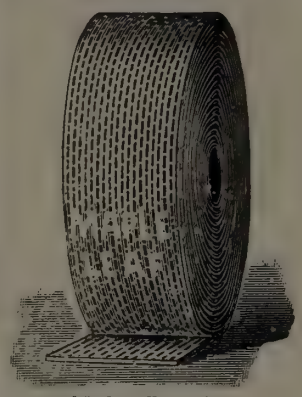

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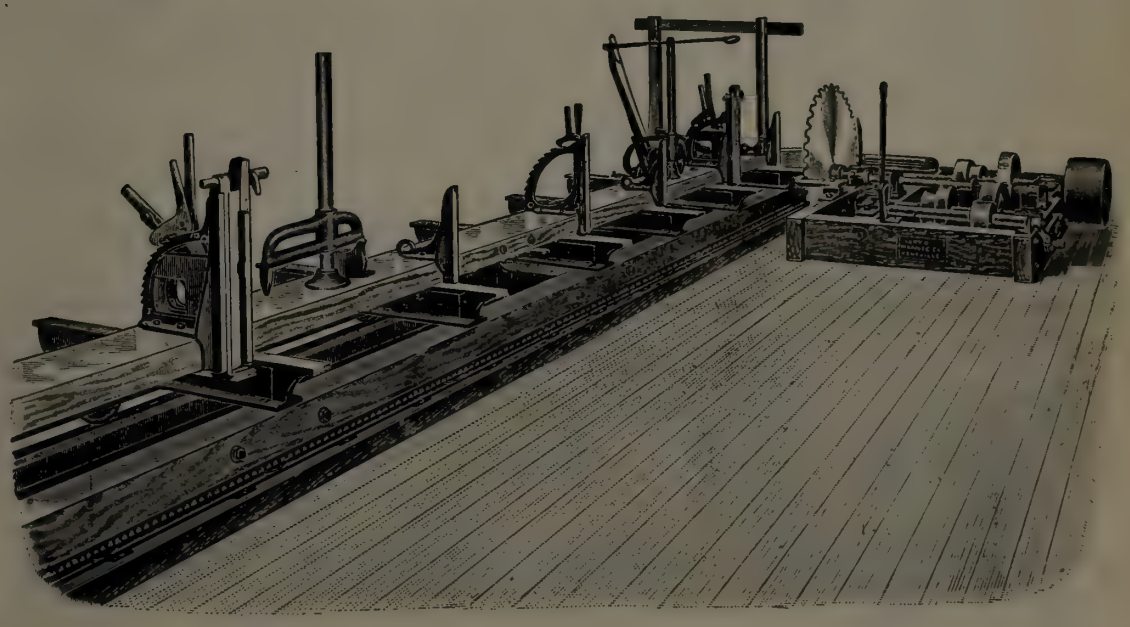

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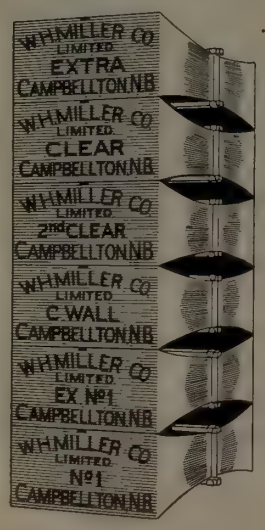

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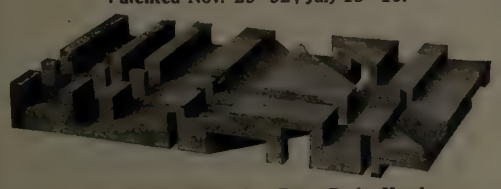

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"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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The Oriental Labor Problem

At a public meeting held in the City Hall at Victoria, B.C., recently, an interesting discussion took place in conection with the employment of Oriental labor. The matter was brought up by Mr. J. J. Shallcross, a former president of the Board of Trade who expressed his regret in regard to a despatch sent to the Prime Ministers of Australia and New Zealand advising them of a resolution which had been passed asking them only to purchase lumber produced by white labor. The resolution had been forwarded by the Victoria Trades and Labor Council. The meeting addressed by Mr. Shallcross was held in order to give support to an application to the British Columbia Government in favor of requiring the employment of white labor in production of lumber purchased by the Government.

Mr. Shallcross said that this resolution would have a detrimental effect upon the industry in British Columbia and if its object were achieved some of the British Columbia mills would have to close down. Many important questions were involved in the main question. The Board of Trade had been seeking to encourage reciprocity between Canada and other British Dominions, and had found many difficulties, one of which was the great scarcity of tonnage, practically all of which was controlled, so far as the Pacific Coast was concerned from San Francisco. The white labor problem ought to be considered from the economic standpoint no less than from the patriotic standpoint. It should not be forgotten that the Chinaman had paid for his opportunity to earn a living in Canada. A great deal had been said about the standards of living maintained by the Oriental yet he was satisfied that the Oriental in British Columbia maintained a better standard of living than some of the United States citizens in the districts around Pittsburgh. Mr. Shallcross then pointed out that the volume of export trade from British Columbia had decreased during the past ten years, while that of the Washington and Oregon mills had increased ten-fold.

A resolution which had been passed at a meeting of the Council of the Board that morning expressing the opinion that the time was inopportune for a change was presented by Hon. Col. Prior, president of the Board. The Board and the Government had put forward special efforts, he said, to assist in the development of the export trade and to secure the despatch of a trade commissioner in the person of Mr. H. R. MacMillan to develop our foreign trade in lumber. The success of this work should not be endangered by the imposition of special restrictions. The wording of this resolution was as follows:—"In the opinion of the Board of Trade, it is unwise, during the negotiations for improved business relations with Australia and other countries with a view to increasing our exports of lumber, that any change should be enforced in the lumber industry, which would place British Columbia mills at an increased disadvantage with mills in the United States."

On behalf of the lumbermen Mr. J. O. Cameron stated that by employing Chinamen the industry obtained economical and reliable help at reasonable rates. Further, he pointed out that at the present time the white laborers in their employ were securing fully 85 per cent. of the money spent for labor. In May, his company had paid white labor $4,266 at the mill, and $2,580 to Orientals. In addition, $12,000 was spent for white labor in logging operations, and about $1,500 in getting the logs to the mill. Royalty to the Government took another $1,000. In other words, about $20,000 was spent for white labor compared with $2,500 for Oriental. Mr. A. Gonnason added to Mr. Cameron's remarks by stating that Chinamen in his employ frequently stayed several years and developed great skill in the use of machinery.

The labor side of the case was presented by the president of the British Columbia Federation of Labor, Mr. A. Watchman, and three delegates of the Trades and Labor Council, who dwelt upon the patriotic side of the situation and also urged that it was not necessary for the mills to employ Oriental labor, as suitable white labor could be found for the work. After the Council had heard all the speakers the matter was referred back to the City Council for further consideration.

Co-operation in Fire Protection

It has been said that as a community, the settlers of British Columbia co-operate in forest protection work to a greater degree than in any other part of Canada or in the United States. In view of this, the Minister of Lands of B. C., has instructed the district foresters to distribute a circular letter embodying the regulations concerning fire permits, giving rules for guidance when burning slash or brush in land-clearing operations, and information as to what should be done if fire breaks out. The importance of care with fire is clearly set out, together with an appeal for the help of every citizen. The letter gives facts showing the necessity for adequate fire protection to the timber industry and the importance to the Province of that industry, an industry which in ordinary times contains half the capital, employs half the labor, and pays half the wages distributed in British Columbia.

The letter referred to above states that the close season for burning permits is now from May 1st to September 15th instead of May 1st to September 30th as formerly. During this season a burning permit must be obtained from a fire warden before a fire is set out for land clearing, brush burning, etc. The Department is doing all it can to avoid placing restrictions on land clearing work. Each fire warden has been instructed to see that all settlers are visited as often as possible, so as to prevent delay in giving out permits. Settlers are urged to do their burning in the early and late parts of the season, when weather conditions are safe and to dispose of all slash, especially that near railroads, public roads, etc. For the guidance of all who are burning slash the Department has drawn up the following rules:—

1. Burn in the early spring and fall, preferably when the slash is dry but the soil damp. When the soil is very dry a fire will destroy the humus or vegetable matter which enriches the top layer, and also is much more difficult to handle.

2. If possible, have one or more neighbours assist in the burning so that the fire may be kept under control at all times.

3. Always make a light fire-break around the slash by throwing

any brush or litter in for say 10 or 20 feet. This will help to confine the fire and let you get around it quickly should it start to spread.

4. If the slash adjoins timber, burn it if possible when there is a light breeze blowing away from the timber, and start the fire first on the leeward side. If the slash is on a side-hill, start fires first on the upper side, and burn down-hill. When a good guard has been backed along the top, fires may be set at the foot of the slope and allowed to burn up.

5. If conditions are at all dangerous, never start a fire in the morning. The best time to start burning is after 4 o'clock in the afternoon of a calm day. The slash is then dry and burns readily, there is little danger of wind, and the fire burns out during the night, when it is least apt to escape.

6. Burn over the area as quickly as possible.

7. Keep close watch on the area until all fires are out.

After dealing with the importance of co-operation in fire fighting the Department urges everyone who discovers a fire on Crown Lands, or a fire which threatens to spread to Crown Lands, to notify the fire warden if it cannot be readily extinguished, and also to report the details in case of having extinguished a fire without calling in the warden. In conclusion the report says:—

The greatest aid to agriculture and to settlement in British Columbia is a flourishing and prosperous lumber industry. This industry contains half the invested capital in British Columbia and in ordinary times employs half the wage-earners and pays half the wages. Out of every dollar spent in logging and manufacturing lumber, over 80 cents goes directly to the comumnity to employ labour and buy supplies and transportation. The annual revenue from the forests forms about a quarter of the total Government revenue. It helps to build roads, schools, and all kinds of public works. It keeps the taxes down. The continuance and increase of this revenue is directly dependent on the prosperity of the lumber industry.

Fire protection is necessary to ensure a permanent supply of raw material for the lumber industry. It is necessary to preserve the mature timber for cutting now and in the future. It is equally necessary to protect the second growth to provide saw-timber for the more distant future when the demand will be much greater than at present. It takes 100 years or more for a second crop of timber to grow after a fire or after logging. If repeated fires occur the young growth is destroyed, the soil injured, and the timber crop is delayed indefinitely.

The public owns outright a large proportion of the standing timber and nearly all the forest land of British Columbia. Much timber is held in partnership with the public under leases and licences. Citizens are therefore shareholders in the forest resources of the Province, and are urged to be careful with fire in the woods, and to give every assistance in their power toward the prevention and suppression of forest fires.

B. C.'s Lumber Marketing Problems

In a recent issue of the Canada Lumberman we published a number of interesting extracts from the report of the Forest Branch of the Department of Lands of British Columbia for the year ending December 31st, 1914. The report is an extensive and valuable one and a section of it to which we did not refer in our previous issue, dealing with the export lumber trade of British Columbia is interesting to our western readers. The part played at present by British Columbia in the export trade of the Pacific Coast is shown by this report to be absolutely small, the exports by cargo shipment during 1914 from British Columbia having amounted to only 38,031,246 feet b.m. while those from Washington and Oregon reached a total of 1,610,947,654 feet b.m. Dealing with this situation the report says:—

The same necessity for expansion of markets exists in the Northwestern States as in British Columbia. British Columbia, therefore, in striving for sufficient markets to keep her mills operating, will be forced to meet the keen competition of the American mills. The nature of that competition may be judged from the fact that, although the market in the Canadian Prairie has never been great enough to take more than three-fifths of our output. The Americans have in nearly every year of the past five supplied at least one-fifth of it. Although there is now free lumber into the United States, only 40,000,000 fet were shipped from British Columbia to the United States in 1914, as compared with the 77,000,000 feet imported into the Canadian Prairie from the United States during the same period.

To find and hold a wider lumber market will tax every resource of both manufacturers and Government through years of effort. There can, however, be no argument about the necessity of making an attempt.

The extension of markets for British Columbia is such a public necessity that it should engage the attention of the Government as the largest shareholder and as trustee of the public prosperity, though obviously no great improvement can be expected until the selling-price of lumber is again greater than the cost of producing it. This selling-price can only be increased by the operators.

The mills of the Western States with their 12,000,000,000 feet annual capacity will eventually determine the price at which lumber will be sold in export markets, both in the Canadian Prairie and elsewhere. Therefore, to stay in business, the British Columbia logger and manufacturer must meet American costs. That is the first essential. The present great variation in costs between different manufacturers in this Province shows that the average production costs may be reduced even as things are, while changing economic conditions in the near future will make this easier. Cheaper production and a more aggressive marketing system to bring consumers into closer touch with manufacturers are problems to be solved by the industry.

The Government can rightfully help the lumber industry to advance into new markets in three ways: Firstly, by furnishing the lumberman data as to the strength and other characteristics of our timber for advertising purposes; secondly, by studying foreign markets and supplying information to the trade; thirdly, by making British Columbia products known in the markets which British Columbia manufacturers are endeavoring to enter. The wisdom and the propriety of this work cannot be too strongly urged. One of the most important Government obligations in forest-management in British Columbia is to cause the forests to bear their full share in the support of the community.

Hardwood Grading in Canada

A United States wholesale lumber dealer with whom we recently had some correspondence gave expression in one of his letters to views upon the subject of grading which carry a great deal of significance for the Canadian trade, both consumers and producers. This United States wholesaler handles hardwoods and does a considerable volume of trade with Canada, so that his views are of importance to our readers. The correspondence arose out of the fact that, in a letter to us this wholesaler, after expressing his unwillingness to have his views published over his own name—not being desirous of being set down as a critic—stated that he had considerable trouble with grades of lumber bought from Canadian mills and that the consuming trade in Canada seemed to be satisfied with an inferior grade which, to a great extent, worked him out of the Canadian market, for he refused to ship any stock unless its invoice showed the exact grading of the consignment. "We do however," he continued, "sell other wholesalers a good many cars which go to Canada. . . . . As a matter of fact we have practically given up selling in the section from Toronto north and east, except what mixed cars we sell to other wholesalers which are consigned into that territory."

The criticism expressed in this letter is one which we have some-

times heard from other lumbermen, both in Canada and the United States, and which we have heard applied not only to Canada, but to many parts of the United States as well. For this reason we asked the wholesaler to elaborate on his views so that we might place them more definitely before our readers. In a second letter he complied with our request, and his views in full—part of which we published in our Export Number of June 1st—is now published elsewhere in this issue.

The writer divides his criticisms into two sections, one dealing with the Canadian shipper, and one dealing with the Canadian consumer. The shipper, he finds, is quite ready in many cases to ship under National Rules, but makes his willingness of no effect by requiring that the inspection shall be at the shipping end, i.e., at the mill. The United States wholesaler does not buy sufficient stock in Canada to make it worth while sending a man to the Canadian mill to make the inspection, and this wholesaler finds that the number of licensed inspectors under National Rules in Canada is not sufficient for this purpose. These facts have caused him to go to West Virginia for items of birch which he could buy to better advantage in Canada. This is a remarkably strong instance of the effectiveness of organization. It shows that the United States lumbermen by organizing their inspection and grading have been able to induce trade to flow along lines which are not naturally to its advantage. "The average Canadian shipper," this wholesaler adds, "should either get his nerve up to back his grade, or arrange some workable plan, whereby the wholesaler who purchases from him can get a grade at a reasonable price that he himself can back up."

In conection with the consuming end the criticism offered is even more definite and important to the Canadian trade. "We have quoted on Canadian business," this wholesaler says, "failed to get the order and have immediately shipped this same stock for other parties at the same or better prices than we originally quoted, but with a certain percentage of lower grade stock mixed in with the shipment. . . . . This may be a proper procedure on the part of the third party and may even be a criticism of ourselves for not knowing the grade that the consumer takes, but nevertheless, if the consumer asks for 1st and 2nds, with us it is final proof that 1st and 2nds is what he expects to receive. . . . . Such firms would probably get better value for their money if they would acquaint themselves more readily with prevailing rules and either demand what they specify or else accurately describe the grade and quality which they desire."

There is much more to the same effect in the letter, which we advise our hardwood friends to read. The hardwood trade in Canada is of sufficient importance to warrant attention being given to this problem until it can be solved. We do not expect that such troubles will ever be eliminated entirely, but undoubtedly much of the trouble can be removed and the business made much smoother and more respectable for all parties concerned.

Editorial Short Lengths for Busy Readers

In its issue for June 12th, the Timber News, of London, England, under the heading of "The Extraordinary Position of Freights" has the following to say:—

If there is a more engaging topic of conversation in the timber trade to-day than "freights" we shall be glad to hear of it.

The shippers' f.o.b. quotations, we all know, have a tendency to retire, so that the buyers may not altogether be frightened out of business, but it may be noted that of the two movements the "upward" one of freights is the more pronounced. The effect, therefore, is seen of the c.i.f. value slowly, but surely, forging ahead.

The most disappointed man to-day is probably the shipper, who views with very mixed feelings the ever-advancing rate of freights. Given rates of 80s. per standard, or just thereabout, from the White Sea, with, say, 90s. per standard from the St. Lawrence, and 50s. to 60s. per standard from the Swedish side, and the shippers would have looked forward to good business this summer, but the White Sea does not look easy to arrange at 110s. to the East Coast, or the St. Lawrence at 140s. to the West Coast, or Lower Gulf Sweden to East Coast at 90s. per standard. It is even reported that Haparanda to London has been fixed at 100s. per standard.

However, the keenest regrets must be experienced by the Pacific Coast exporters, who are up against suggested rates of anything from 250s. to 280s. per standard to U. K., but apparently no boats are obtainable. It is said that the shippers would be satisfied with £4 per standard f.o.b. for Douglas fir (merchantable) plank and deals, if they could only find steamers. A more remarkable position it would be difficult to call to mind, although from all accounts the Gulf exporters of sawn pitch pine are similarly situated. We are given to understand that many of the Pacific and Gulf mills are temporarily closing down in consequence. . . .

It is hard of belief, but nevertheless true, that rates of freight to-day are treble, and in some cases quadruple the average normal quotations, and the immediate future holds out no relief so far as can be seen.

The following extract, taken from Commerce Report No. 125, Department of Commerce, Washington, D. C., is of interest to British Columbia lumbermen:—"Other western woods eliciting considerable interest among the Brazilian lumber dealers who inspected my samples were Sitka spruce and Douglas fir. The former was examined as a substitute for the Swedish pine, especially for box lumber, and the latter for the other miscellaneous uses for which the Swedish red pine and some of the white serve. Proper prices will result in small orders for these woods, which were unknown in these markets, and the same is true of cypress.

"In offering Brazil a substitute for Swedish pine American firms should seek the business with a view to supplanting permanently the European lumber. To accomplish this the grade of the pine from the Baltic region should be studied. Other conditions must also be carefully noted, particularly the size. The question will naturally arise why the size 3 by 10 inches cannot be used as well as 3 by 9. Custom has established the latter size, and it will be hard to induce dealers to change. The yellow-pine mills have been cutting the 'Rio deal' size for many years, and when the Brazilian saws lumber from native woods and edges his planks he converts as many as possible without too great waste into 3 by 9's. Then, too, the lumber sent to Brazil must be sawn accurately to size, and this refers to lengths as well as other dimensions. This is a very particular point for a competitor with Swedish lumber.

"No defect is regarded more seriously in selling lumber in Brazil than sap stains and discolorations. The Norwegians and Swedes know this, and consequently take care to send only well-seasoned lumber, which arrives at destination bright and in good condition. The Brazilian uses very little of the Swedish pine in the same form in which it arrives. It nearly all goes over the resaw, and this gives the lumberman an opportunity to ascertain if it has been well seasoned. Softwoods must, therefore, be bright and well dried to enter the markets of Brazil, and especially if they are to compete successfully with Swedish pine. To undertake to furnish lumber without regard for these specifications will only result in loss.

"The grade is another matter of particular importance for any lumber offered as a substitute for Swedish pine. It should be a standard grade, accurately defined, and of uniform range."

According to the report of the Forest Branch of the Department of Lands of British Columbia for the year ending December 31st, 1914, the prices realized by timber sales averaged somewhat higher than those commonly secured by private owners for similar timber, the average price for the 48,605,000 feet of timber sold being $1.15 per thousand feet. During the year the Department made 71 sales of timber covering an area of 28,132 acres. The timber sold amounted to 278,077,906 board feet, which together with poles, ties, cordwood, and posts brought in to the Department, revenue to the extent of $349,958.69.

The Commercial Importance of Cedar

Technical Properties and Practical Uses of the Different Varieties of an Important Canadian Wood

By A. H. D. Ross

1. 2. 3. 4. 5.

1.—Eastern White Cedar slash grain. 3.—Eastern Red Cedar edge grain.
2.—Eastern Red Cedar slash grain. 4.—Western Red Cedar edge grain.
5.—Western Red Cedar slash grain.

The word CEDAR is supposed to be derived from the Arabic "Kedr," meaning worth or value, and may possibly have taken its origin from the name of the brook Kedron, in Judea. In Greek, the word takes the form "Kedros," and in Latin "Cedrus," which is the botanical name of the true cedars. For example, the cedar of Lebanon is known to botanists all over the world as "Cedrus libani," the deodar or Indian cedar as "Cedrus deodara," and the African or Mount Atlas cedar as "Cedrus atlantica." These three are the only true cedars, and they are all old-world species, but the name Cedar has been applied to several genera whose wood more or less resembles that of the true cedars. Thus it appears that our cedar trees are not cedars at all, but are always something else, as we shall see during the course of this article.

In the figurative language of prophecy, the cedar of Lebanon is frequently employed in the Scriptures as a symbol of power, prosperity and longevity, and it has always been a favorite with poets and painters. "The righteous shall flourish like the palm tree: he shall grow like a cedar in Lebanon," (Psalm XCII., 12). "Behold the Assyrian was a cedar in Lebanon with fair branches, and with a shadowing shroud, and of an high stature: and his top was among the thick boughs," (Ezekiel XXXI., 3). The cedar of Lebanon is also referred to by Pliny, who says that its wood is everlasting and that for this reason the images of the gods are made of it. He also mentions oil of cedar for the preservation of books from moths and damp. This oil was prepared by distillation of the wood and papyri rubbed with it were known as "cedrati libri."

In Canada, the name "Cedar" is applied to trees belonging to the genera Thuya, Chamaecyparis, and Juniperus; all of which belong to the pine family.

The Eastern White Cedar (Thuya occidentalis) is also known as Arborvitae and American Arborvitae, and adopts itself to a wide range of soils, but prefers moist well-drained ones. Usually it is associated with spruce, larch (tamarack), or balsam fir, and frequently forms dense stands on swampy ground. Its range of growth extends from Nova Scotia to New Brunswick and westward from the Island of Anticosti to the foot of James Bay and Lake Winnipeg. Southward it extends into Minnesota, Illinois, central Michigan, northern Pennsylvania, central New York, and Massachusetts, and along the Alleghany Mountains to Tennessee; the greatest growth being in southern Canada and in the vicinity of the Lake States. A study of 35 trees in Michigan and 44 trees in Minnesota shows that the average age of five inch trees (4½ feet from the ground) was 62 and 87 years, respectively; whilst ten-inch trees were 154 and 167 years old. The stems are often fluted and much buttressed at the base and frequently affected by butt rot. In height the trees are from 25 to 50 feet (occasionally 70 feet) and in diameter from one to two feet. The bark is usually ashy-gray to light reddish-brown, and separates into long, narrow, flat, shreddy strips, often more or less spirally twisted; and is occasionally woven into mats.

The heart wood varies considerably in color, but is generally a pale yellowish-brown, has a characteristic resinous odor, is straight-grained, but rather coarse-textured, weighs about 22 pounds per cubic foot, splits easily, is soft, weak and brittle, but is exceedingly durable in contact with the ground. The sapwood is thin and nearly white in color, and almost as durable as the heartwood. The durability of this wood is its outstanding characteristic, and this explains why such immense quantities of it are used for ties, poles, shingles, fence-posts, fence-rails, etc. Romeyon B. Hough cites a case of a cedar log straddled by a hemlock which on being felled was found to be more than 130 years old—yet the cedar log was quite sound.

Mechanical tests of eastern white cedar from Shawano County, Wisconsin, show that the specimens averaged 23.4 rings per inch, and had an average moisture content of 55 per cent. of their absolute dry weight; the shrinkage in volume being 7 per cent. For the green specimens the modulus of elasticity was 643,000; the modulus of rupture 4,250, and the fibre stress at the elastic limit 2,600; while the endwise crushing strength was 1,990 pounds per square inch for short columns. The hardness test showed that a pressure of 321 pounds was required to force a steel ball 0.444 inches in diameter into the end surface of the wood to half its diameter; 228 pounds for slash-grain specimens, and 225 pounds for edge-grain wood. The shearing strength in a radial direction was 617 pounds per square inch, and in a tangential direction 614 pounds; whilst the cleavage (splitting) strengths per inch of width were 148 and 139 pounds, respectively. If you ever made yourself a cedar "bow-and-arrow" or rived shingles you will now understand why the wood split so nicely. With a reduction in the moisture content of the wood its strength is increased enormously; an average of 87 tests on wood containing 12 per cent. moisture showing strengths of 750,000 for modulus of elasticity, 6,300 for modulus of rupture (across the grain), and 5,200 pounds per square inch for endwise crushing strength.

Eastern Cedar Ties

During the year 1914 the 47 steam railways and 31 electric railways operating in Canada reported a purchase of 19,403,646 ties, of which 13.7 per cent. were eastern white cedar. Jack pine ties ranked ahead of it with 43.2 per cent. of the total number of ties purchased, and tamarack just below it with 7.8 per cent. The average price paid for cedar ties was 48 cents each. For roads with a moderate passenger and freight traffic cedar ties are as satisfactory as any other; practically the only objections being that they split rather easily and do not hold spikes as well as tamarack or hemlock.

Although cedar is light and soft, yet its small medullary rays prevent its absorbing proportionately so much water into its wood cells as hemlock and spruce, and experience shows that after 3 or 4 years it is not so badly crushed under the rail as hemlock and spruce. Another peculiarity of cedar ties is that they are nearly always more or less defective because of the ravages of fungus diseases known to scientists as "Agaricus campanella" and "Agaricus melleus"; yet when placed in the roadbed they last from 8 to 10 years. Some ties will have from 5 to 10 small spots of decay and others a badly decayed centre, but so long as there is sufficient sound wood for spiking they are considered good and their decay is so slow that their mechanical destruction is complete before they have rotted out. The crushing of the wood under the rail is due to the fact that the pithray system is composed of very small thin-walled cells, and its durability is due to the presence of resinous products in the wood cells which are not easily attacked by fungus diseases.

During 1914 the number of eastern cedar poles purchased by telegraph, telephone and railway companies was 241,633; which is 85.3 per cent. of the total number. Western red cedar ranks next with 36,356 poles, or 12.9 per cent.—the remaining 1.8 per cent. being distributed chiefly amongst spruce, tamarack, and cypress. Eastern white cedar still heads the list as it has always done, but the supply is decreasing.

In Quebec Province over 97 per cent. of the shingles manufactured are of white cedar; in New Brunswick 98 per cent.; but in Nova Scotia and Prince Edward Island very little cedar is found. In Ontario cedar easily heads the list, although a large amount of white pine, hemlock, red pine, and other woods are also sawn into shingles. During 1913 the shingle cut in Quebec mills amounted to 363,560,000 at an average price of $2.22 per M, in New Brunswick 306,148,000 at $2.15 per M; in Ontario 128,211,000 at $2.40 per M; in Nova Scotia 41,327,000 at $1.98 per M. Wherever cedar can be obtained for the manufacture of shingles it is used because of its durability and the fact that it holds nails well. When other woods are used it is either

because of their being cheap and abundant or forming part of the mill waste which can be manufactured into shingles at a profit. Of the split or "rived" shingles, almost all are made from cedar, which has a straight grain and splits evenly and easily. This also explains why so much cedar was used in the construction of the old "snake fences" on many farms in eastern Canada.

The camparatively small amount of eastern cedar sawn into lumber is due to the small size of the trees, their rapid taper and the high value the wood has for ties, poles, shingles and posts. The following table exhibits the cut by provinces for the year 1913, which was a trifle less than two-thirds the cut for 1912.

Ontario	168	9,493,000	$15.96
Quebec	215	6,727,000	15.67
New Brunswick	15	5,100,000	9.19
Nova Scotia	1	50,000	12.00

The saw material is used mainly for fencing, verandah work, tanks, tubs, slack cooperage, and planking for boats and canoes; minor quantities being used for boxes, bodies of vehicles, piano actions, trunk boxes, etc.

Of the 739,678,000 lath sawn in 1913, cedar made up 17.8 per cent., but by far the greater portion of this was the western red cedar of British Columbia. Spruce made up 35.1 per cent. of the lath, and white pine 30.1 per cent.; cedar ranking third with 17.8 per cent.

Western Red Cedar

The Western Red Cedar (Thuya plicata) is closely related to the eastern white cedar (Thuya occidentalis) and resembles it in many ways. Western red cedar is also known as Giant Cedar, Giant Arborvitae, Canoe Cedar and Shinglewood. Its range of growth is from Alaska southward along the coast ranges of British Columbia, western Washington and Oregon, through the California coast region and eastward along the mountain ranges of south-eastern British Columbia to the western slope of the continental divide, and south-eastward to Idaho and Montana. From sea level to elevations of 6,000 feet in the interior it occurs singly or in small groves on low moist bottoms or near the banks of mountain streams, and thrives on a wide range of soils, provided there is sufficient moisture. Like hemlock, it is able to withstand considerable shading and is a persistent grower. Uusally the trees are buttressed at the base and affected by butt rot; mature trees being 100 to 150 feet in height, and 3 to 8 feet in diameter. Occasionally a tree 200 feet high and 15 feet in diameter is found—whence the name "giant cedar."

The heartwood is usually of a dull brown color tinged with red, straight-grained, coarse-textured, is easily split, has a dull lustre, and an agreeable odor, but is tasteless or nearly so, weighs about 24 pounds per cubic foot, and is soft, weak, and brittle. The sapwood is thin and nearly white. Specimens containing 55 per cent. moisture have an endwise compression strength of 1,990 pounds per square inch; a modulus of rupture (cross-breaking) of 4,250, and a modulus of elasticity of 643,000. For "air dry" wood, which contains approximately 12 per cent. moisture, the modulus of rupture is raised to 10,600, and the modulus of elasticity to 1,460,000.

During 1913 some 88 mills out of 159 operating in British Columbia reported a cut of 82,627,000 board feet of cedar, or 7 per cent. of the total cut of 1,173,647,000 for the whole province. Douglas fir ranked first with 67,6 per cent., tamarack second with 7.3 per cent., and cedar third. The average prices were $13.73 for fir, $13.62 for tamarack, and $14.65 for cedar.

Both eastern white cedar and western red cedar are easily and rapidly seasoned and easy to work, but the wood of the western cedar is more spongy in texture and is less durable than that of the eastern. As lumber it is used for sheeting, siding, studding, planking for boats and canoes, tanks, pails, tubs, etc. For inside finishing, doors, etc., the wood dents rather easily.

For telegraph and telephone poles western red cedar is rapidly replacing eastern white cedar—especially in the greater length-classes. Scarcely anything is used in B. C.; and in the Prairie Provinces about half the poles are of western and the balance of eastern cedar. The so-called "Idaho red cedar" is identically the same wood as from British Columbia. During 1914 the number of red cedar poles reported from B. C. was 36,356, at an average price of $3.81 each. The total number of poles reported for 1914 was 283,184; so it will be seen that western red cedar made up 12.9 per cent. of the total, whilst eastern white cedar made up 85.3 per cent. Spruce came next with 0.9 per cent.

For ties, very little western red cedar is used, the reports for 1913 showing only 13,817 out of a total of 19,403,646—which is equivalent to only 0.1 per cent., and places it 17th in a list of 22 woods used for tie purposes.

The total shingle cut reported for 1913 was 1,485,279,000; of which 93.7 per cent. was cedar. This shows that cedar is still preeminently the shingle wood. From eastern white cedar the number of shingles sawn was 748,626,000, and from the western red cedar of British Columbia 643,484,000. Lumped together, the average price obtained was $2.05 per M.

It is a common saying in Britsh Columbia that the timber estimates turned in for cedar are usually below the actual cut. One reason for this is that logging brings to the mill much cedar that has lain on the ground for years without decaying and which was not included in the estimate of standing timber. In other cases the discount allowed for defects has been too high—and it certainly does run high in some localities. When sound fallen logs are pulled out of the ground the loggers speak of the operation as "mining for cedar." The heartwood of western red cedar is often quite dark in color streaked with lighter shades, and if properly treated produces some very beautiful interior finishing material.

Yellow Cedar

Yellow Cedar (Chamaecyparis nootkatensis), is also known as "Yellow Cypress, "Alaska Cypress," and "Nootka Cypress." This tree ranges from south-western Alaska to northern Oregon; being most abundant and reaching its best development on the coast and adjacent islands of British Columbia and southern Alaska. Under favorable conditions it forms pure stands, but usually is associated with Sitka spruce, western red cedar, and western hemlock. It requires an abundance of moisture in both soil and air, but does not need a deep soil to thrive. Under favorable conditions the trees attain a height of 75 or 80 feet and a diameter of 2 or 3 feet; occasionally 90 to 120 feet and 3 to 6 feet. The trees are very slow growers, and the wood is wonderfully sound with a very thin and nearly white sapwood. The heartwood is a clear sulphur-yellow, is exceedingly fine textured, weighs 30 pounds per cubic foot, is quite hard, elastic, rather brittle, splits and works easily, and is remarkably sound in the ground. Trees dug up from peat swamps yield wood which takes a beautiful finish, and amongst the Indians it is often used for the manufacture of paddles, carved boxes, etc. "Air dry" wood showed a modulus of rupture of 11,000, and a modulus of elasticity of 1,460,000. Occasionally this wood is mixed with western red cedar, but its superior properties place it in a grade by itself for interior finishing, cabinet-work, boat-building, etc.

Eastern Red Cedar

Eastern Red Cedar (Juniperus virginiana) is also known as "Northern Red Cedar," "Pencil Cedar," "Savin," and "Red Juniper." Its range is from southern Nova Scotia through New Brunswick, along the St. Lawrence and Ottawa Valleys, to Dakota; and southward to Florida, Alabama, and Texas. Usually it is found on dry gravelly ridges and rocky slopes and is too small for anything but fence posts or pencilwood. The stems are more or less ridged and buttressed at the base and the reddish-brown bark separates into long, narrow, shreddy strips more or less fringed at the edges and often spirally twisted.

The heartwood of this tree is of a beautiful dull red color inclining to purple and fading on exposure to purplish-brown. The sapwood is thin and nearly white. The growth rings are usually very irregular in width and outline. When freshly cut the wood has a very fragrant aromatic odour which gives it a high value for moth-proof chests. In tangential (edge-grain) sections the wood often exhibits a beautiful frosted appearance. The resin cells are very numerous, deeply colored and easily visible under a magnifying lens; the wood itself being very durable in the ground. In texture the heartwood is very fine, and by far the greater quantity of it is used for the manufacture of pencils. The wood is rather brittle but works easily in the machines and whittles nicely in the sharpening of the pencils. In the United States alone the annual output of pencils is over 325,000,000, requiring the purchase of 7,800,000 cubic feet of wood; nearly all of which is eastern red cedar. The pencil manufacturers say that the supply will be exhausted in five or ten years and are already experimenting with substitutes. Alligator juniper is said to be rather hard; one-seeded juniper spongy and suitable for only the cheaper grades of pencils; Rocky Mountain red cedar practically the equal of eastern red cedar.

Rocky Mountain Red Cedar

For a long time this tree (juniperus scopulorum) was confused with eastern red cedar (juniperus virginiana) to which it is very similar. In Alberta it ranges from the foothills to the Rockies and westward through British Columbia to the coast; southward through Washington, eastern Oregon, Nevada and northern Arizona to Texas. To all intents and purposes its wood is identical with that of eastern red cedar, and it may be used for similar purposes.

Other Cedars

Other North American trees which go under the name of cedars are:—the white cedar (Chamaecyparis thyoides) of cold costal swamps from southern Maine to northern Florida and with a wood resembling the eastern white cedar already described; the incense cedar (Libocedrus decurrens) of the coast region from central Oregon to southern California with a light reddish-brown wood much used for flume construction; and Port Orford cedar (Chamaecyparis Lawsoniana) of the coast region between south-western Oregon to the Klamath River, California, with a light yellow or almost white

heartwood scarcely distinguishable from the sapwood. Amongst the foreign woods known under the name of cedar, we may mention the following:—Cedrela odorata, which is variously known as Spanish cedar; Jamaica cedar, or Honduras cedar, and belongs to the bead-tree family. It is much used in the manufacture of cigar boxes, microscope cases, etc. Another tree closely related to it is Brazilian cedar (Cedrela flexilis). In New Zealand Iibocedrus bidwillii (first cousin to incense cedar mentioned above), is known as cedar, and by the Maoris is called "pahantea." The wood is dark red and is easily worked.

Amongst the near relatives of eastern red cedar we have the Spanish cedar (Juniperus thurifera) of the western Mediterranean region; Bermuda cedar (Juniperus bermudiana) of the Bermuda and Bahama Islands; and Rock cedar (Juniperus mexicana) which is common to the limestone regions of Texas and Mexico.

The Japanese cedar (Cryptomeria japonica) is the largest tree in Japan—attaining a height of 120 feet and a diameter of 10 feet. Its native name is "sugi," and the wood is white, fine-textured, has a pleasant odor, and is easy to work.

Guiana cedar 'Icica altissima) is a large tree up to 100 feet high, and yields a fragrant, durable wood which is easily worked and is used to make canoes.

In South Africa, Cape cedar (Callitris juniperoides) is a fair-sized tree. In Tasmania the term "pencil cedar" includes the three species Arthotaxis cupressoides, A. laxifolia, and A. selaginoides. In Australia Pentaceras australis of the rue family is known as scrub white cedar; Ehrectia acuminata of the borage family as brown cedar; Drysoxylon rufum as bastard-pencil cedar; and Rhus rhodanthema of the sumach family as yellow cedar.

Further Shell Box Particulars

The Shell Committee, Stephen Building, Ottawa, have made public the following further details in connection with the specification for shell boxes, which was published in the Canada Lumberman of June 15th:—"In reference to the screw used to secure the cover in the 4.5 shell box, we would say that you have the alternative of using No. 12 x 1¾ ins. or No. 14 x 1¾ ins., and that there is to be only one screw in each end and two in each side, suitably spaced.

"Further the cleats on the cover are to be made ⅝-inch instead of ½-inch. Also, the lumber throughout the box may be dressed to an even thickness not less than ⅞-inch."

Timber sales completed during the month of May, by the Forest Branch of the Department of Lands of British Columbia amounted to 535,000 feet B.M., and 1,300 cords, the total estimated value being $1,895.39. The purchasers were the Seaboard Logging Company, Seattle, Wash., and N. D. Sweet, Prince Rupert, B.C. The quantity of timber scaled in all districts of British Columbia during May was 41,335,237 feet B.M., of saw logs, 167,381 lineal feet of poles and piles, and 15,482 cords of railway ties, shingle bolts, fence posts and cordwood. The total quantity of timber exported from oil districts during May was 7,608,046 feet B.M.

Carrying a capacity cargo of 1,200,000 feet of lumber for New York, taken on at the Genoa Bay mills of the Cameron Lumber Company, Limited, Victoria, the American steamer Tallac is now visiting Atlantic waters for the first time in fourteen years. The vessel was built in West Bay City, Mich., for freighting on the Great Lakes, being equipped with a forest of derricks for handling cargo. From the upper lakes the Tallac was shifted to the Atlantic Coast, and in 1901 the vessel was brought to the Pacific Coast around Cape Horn. The Tallac may remain in eastern waters all summer.

The fire situation in B. C. generally remains safe according to recent advices reaching the Minister of Lands. Few fires have been reported during the last month, and these have been easily controlled and extinguished. At the same time permits to burn have been taken advantage of widely, settlers continuing to show much activity in their clearing operations, especially in the Lillooet and Island districts.

From Kamloops, B.C., much satisfaction on the part of the mills is recorded in consequence of the orders which are being received, while in the Nelson District it is reported that the British Canadian Lumber Company at Crescent Valley, and the Forest Mills at Cascade expect to resume operations shortly.

A report from Portland, Oregon, states that more than 5,000,000 feet of Oregon spruce has been sent to Great Britain and Europe within the past three months for use in making military aeroplanes. Great Britain has been the principal buyer.

The Hardwood Grading Situation in Canada

Editor Canada Lumberman:—

We have considerable trouble with the grades of lumber bought from Canadian mills and we also find that the consuming trade in Canada seems to be satisfied with an inferior grade, which, to a great extent, works us out of the market, for we refuse to ship any stock unless our invoice shows the exact grading of the consignment. We do, however, sell wholesalers a good many cars which go into Canada. We have practically given up selling in the section from Toronto, north and east, except what mixed cars we sell to wholesalers which are consigned into that territory.

To get down to concrete examples in buying lumber from Canada, we note that Canadian mills seem to be willing to ship under National Rules, but as a general thing they want inspection at their mill to be final. This would be all right if we should buy sufficient to warrant sending our man up there while the lumber is being loaded, and it would be perfectly convenient if Canada had a sufficient number of licensed inspectors up there to give service at a reasonable cost, but in a case of buying one or two, or even three cars from a Canadian shipper we find, as a general rule, that the cost of obtaining a satisfactory inspection at the mill is too great. We ship our lumber subject to the National Rules at destination, or if we have a very technical customer we sometimes think it saves trouble to put a National inspector on here before shipping. But when a Canadian shipper demands National inspection at shipping point to be final, it does not mean anything at all unless a National inspection can be made at shipping point at a reasonable cost. This fact has caused us to go to West Virginia for items of birch which we could really buy to better advantage in Canada, except that, in order to get an inspection that we ourselves could guarantee we would have to go to large expense and trouble.

As a concrete example of selling troubles in Canada, we have quoted on Canadian business, failed to get the order and have ultimately shipped this same stock for other parties at the same or better prices than we originally quoted, but with a certain percentage of lower grade stock mixed in with the shipment. In other words, we would quote a Canadian firm $60 per M. on an item of 1st and 2nd oak. Following up the quotation, we would find that our prices were high, but we would ultimately sell a third party 7,000 ft. of 1st and 2nds oak at $60 with 3,000 ft. of selected No. 1 common mixed in with the shipment at $45. Now this may be a proper procedure on the part of the third party and may even be a criticism of ourselves for not knowing the grade that the consumer takes; but nevertheless, if the consumer asks for 1st and 2nds, with us it is final proof that 1st and 2nds is what he expects to receive.

Another illustration is that we have numerous times quoted Canadian firms on genuine northern white ash and oak and we have in a great many cases been informed that our prices were not only high, but considerably high. The writer recently made a trip into Canada and looked over some stocks that a number of these consumers had on hand and he is reasonably certain that the so-called northern white ash that they had was southern cane white ash and that a great deal of the northern tough oak that they had on hand was Kentucky and Tennessee oak. This also is a case that might not be open to criticism, for it is quite possible that the consumer received just what he wanted; however, he was not receiving what he asked for. It prevented us from contending for his business because we ourselves could have furnished southern cane ash and Tennessee oak at a lower figure than we would furnish the genuine northern stock.

The points we are making are in no way whatsoever a "howl" on our part, and we are not in any way whatsoever putting ourselves up as a "More holy than Thou" firm. As stated previously we are shipping a great deal of stock into Canada, but, as a matter of fact, we sell very little to the consuming trade direct. We have made these points simply in reply to your request for an outline of our experience with the Canadian trade.

To sum the whole matter up, we would say that the average Canadian shipper should either get his nerve up to back his grade or arrange some workable plan whereby a wholesaler who purchases from him can get a grade at a reasonable price that he himself can back up. On the consuming end we would say that such firms would probably get better value for their money if they acquainted themselves more accurately with prevailing rules and either demanded what they specified or else accurately described the grade and quality which they desired.

This criticism, however, is not limited to consumers in your section. We bump up against the same proposition with a large number of United States firms, but it is not so prevalent here as it is on your side of the border, and is becoming less prevalent;—take for instance the Jamestown market. In the writer's opinion this market has in the past been badly abused from the standpoint of correct grading, but the Jamestown dealers have apparently awakened to the fact and are making free use of the National inspector on their incoming lumber with the result that shippers now realize that they have to ship stock that is right. Thus Jamestown is getting her money's worth from the viewpoint of association grading.

This is a big problem and brings up the point as to whether the established grading rules are properly fitted to all kinds of business. Very possibly some consumers prefer a special grade and can get better value out of a special grade, but I think it is safe to say that whenever an established grade will answer the purpose it should be insisted upon, for such a standard is the easiest and most accurate way of getting at the actual money value.—U. S. Wholesaler.

Consumption of Poles During 1914

Quantity Decreased 47 per cent—Average Price Advanced 11 cents—Varieties and Values

A bulletin dealing with poles purchased in Canada during 1914 has been prepared by the Forestry Branch of the Department of the Interior, and will be published in the near future. The statistics in this bulletin are based on reports received by the Forestry Branch from 381 firms purchasing poles in Canada in 1914. These firms consisted of 209 telephone companies, 3 telegraph companies, and 17 steam railway companies forming one group, and 132 electric light and power concerns and 20 electric railroads forming another.

The following table shows the poles purchased, 1913 and 1914, by kinds of wood and chief uses—number, total value, and average value:

Kind of wood	1913 Number	1913 Value	1913 Av. Value	1914 Number	1914 Value	1914 Av. Value
Total of all Uses						
Total	534,592	$1,188,331	$2.22	283,184	$660,262	$2.33
White Cedar	264,267	525,853	1.99	241,633	509,503	2.11
Red Cedar	145,569	488,138	3.35	36,356	138,508	3.81
Spruce	5,228	6,046	1.16	2,638	6,740	2.55
Tamarack	115,517	155,682	1.35	1,833	2,107	1.15
Oak	.....	.....	....	213	1,422	6.68
Douglas Fir	.....	.....	....	188	1,553	8.26
Hard Pine	.....	.....	....	126	252	2.00
Jack Pine	1,450	1,299	0.90	100	100	1.00
Chestnut	167	94	0.56	97	77	.79
Balsam Fir	1,437	1,841	1.28	.....	.....	....
White Pine	682	8,095	11.87	.....	.....	....
Cypress	128	1,056	8.25	.....	.....	....
Hemlock	92	32	0.35	.....	.....	....
Western Larch	39	163	4.18	.....	.....	....
Ash	16	32	2.00	.....	.....	....
Electric Railway, Power and Light Companies						
Total	65,071	355,072	5.45	97,073	303,103	3.12
White Cedar	33,907	143,196	4.22	84,279	211,307	2.51
Red Cedar	29,855	205,749	6.89	12,290	90,016	7.32
Spruce	835	1,896	2.27	286	192	.67
Douglas Fir	.....	.....	....	155	1,485	9.58
Tamarack	305	3,007	9.89	63	103	1.63
Cypress	128	1,056	8.25	.....	.....	....
Western Larch	39	163	4.18	.....	.....	....
Hemlock	2	5	2.50	.....	.....	....
Steam Railways, Telephone and Telegraph Companies						
Total	469,521	833,259	1.77	186,111	357,159	1.92
White Cedar	230,360	382,657	1.66	157,354	298,196	1.90
Red Cedar	115,714	282,389	2.44	24,066	48,492	2.01
Spruce	4,393	4,150	0.94	2,352	6,548	2.78
Tamarack	115,212	152,675	1.33	1,770	2,004	1.13
Oak	.....	.....	....	213	1,422	6.68
Hard Pine	.....	.....	....	126	252	2.00
Jack Pine	1,450	1,299	0.90	100	100	1.00
Chestnut	167	94	0.56	97	77	.79
Douglas Fir	.....	.....	....	33	68	2.06
Balsam Fir	1,437	1,841	1.28	.....	.....	....
White Pine	682	8,095	11.87	.....	.....	....
Hemlock	90	27	0.30	.....	.....	....
Ash	16	32	2.00	.....	.....	....

That the market for wooden poles in Canada is very irregular is demonstrated by the diagram inserted in this bulletin, showing the purchases of this commodity in the last five years.

The activity of the different railways in extending their lines is one factor that affects these figures. Some of the provincial Governments which control telephone companies purchase large stocks of poles and furnish these to small independent telephone lines. Their purchases are of necessity irregular and have fallen off considerably in the last two or three years, sufficient telephone accommodation having been established.

Decrease of Nearly One-Half

The purchases in 1914 showed a decrease of 47 per cent. from those of 1913, while the average price paid increased by 11 cents.

Only nine kinds of wood were reported compared to twelve in 1913. Poles of oak, hard pine and Douglas fir were reported in 1914, but not in 1913. Decreases occurred with every other kind of wood, the greatest being in the case of tamarack, which amounted to 98.4 per cent. of the figure for 1913.

Eastern white cedar poles headed the list, their number forming over 85 per cent. of the total. Western red cedar from British Columbia and the Western States came second on the list with over 12 per cent. of the total. Poles of these two woods have formed the greater part of the purchases in past years in spite of the increasing scarcity of good material, especially in the case of the eastern tree.

The steam railway, telephone, and telegraph group of purchasers bought 65.7 per cent. of the poles as compared to 87.8 per cent. in 1913. Their purchases in 1914 showed a decrease of 60.4 per cent. from those of 1913. The oak, hard pine, jack pine, and chestnut poles were all purchased by these companies. These companies reported the purchase of 442 treated poles.

The electric railway, power and light companies bought 34.3 per cent. of the poles as compared with 12.2 per cent. in 1913. Their purchases showed a decided increase (49.2 per cent.) over 1913.

Over half the poles purchased in Canada in 1914 were under 26 feet in length, the two cedar species forming 97.9 per cent. of the total in this class. These two kinds of wood formed over 95 per cent. in every length class recorded. Almost a quarter of the total number belonged to the next length class, including poles from 26 to 30 feet in length.

The greater part of the white cedar, red cedar, spruce, tamarack, and chestnut poles and all the jack pine poles belonged to the 20-25 foot class. Oak poles were mostly from 31-35 feet in length. The greatest number of Douglas fir poles were over 41 feet in length, and all the imported hard pine poles were of this same class.

Timber Stands the Tests of Time

St Paul's Church, Halifax, 165 Years Old

"Timbered in times when men built strong,
With a tower of wood grown gray,
The frame of it old, the heart still young,
It has stood for many a day."
(Arthur Wentworth Eaton, in Acadian Ballads).

St. Paul's Church, Halifax, N.S., is one of the most interesting church buildings in North America. It is the Mother church of the Church of England in Canada, and is the oldest Protestant church in the Dominion. To readers of the Canada Lumberman one of the chief

A Timber Church, 165 years old—St. Paul's Church, Halifax, N. S.

interests in connection with this ancient building is the fact that it is constructed of pine and oak, and that it has existed since 1750, a striking contradiction of the sensational attacks which have been made during the last few years upon wood as a building material. The pine and oak of which this interesting church is constructed was brought from Boston, Mass., which in those days was a part of the British Dominion. The church was built "at the expense of the Crown by grants from his Majesty for that purpose, and also by moneys granted to his Majesty for the use of Government." The church was erected on the "Parade" in 1750 by his Majesty King George the Second. It was formally opened for Divine service on September 2nd, 1750. The interior of this church, built of wood, contains a great worth of mural tablets of greater historic interest than probably can be found in any other church on this side of the Atlantic. It has frequently been referred to as "The Westminster Abbey of Canada." The history of the church building is exceptionally interesting, but would be somewhat out of place in these columns. It is especially interesting to note however, that the building, in spite of the fact that it is constructed of wood, has been attacked by fire and has successfully withstood the attack. In the year 1863 the church caught fire from the furnaces, during service. The damage was only slight.

We commend those who have been promoting the attack on wood as a building material and have been trying to persuade the consuming public that wood is particularly dangerous from the conflagration point of view to consider the case of this ancient church building.

Consumption of Ties During 1914

Quantity Showed Slight Decrease—Average Price Advanced Two Cents—Fewer Poles Treated

A bulletin dealing with the cross-ties purchased in Canada during 1914 has been prepared by the Forestry Branch of the Department of the Interior, and will be published in the near future. A total of 19,403,646 cross-ties valued at $8,664,914 were purchased during 1914 by Canadian railways for use in Canada. These companies consisted of 47 steam railways and 31 electric roads. Of this total 1,447,576 ties were treated with preservatives to retard decay. This is about seven per cent. of the total as compared to ten per cent. in 1913.

Cross-ties purchased, 1913 and 1914, by kinds of wood—number, value, average value, and per cent. distribution:

Kind of wood	1913			1914		
	Number	Value	Av. Value	Number	Value	Av. Value
Total	19,881,714	$8,740,849	0.43	19,403.646	$8,664,914	0.45
Jack Pine	7,773,674	3,103,140	0.40	8,379,064	3,624,151	0.43
White Cedar	2,451,527	1,090,436	0.44	2,651,319	1,279.100	0.48
Tamarack	866,231	369,666	0.43	1,507,902	661,717	0.44
Douglas Fir	2,427,100	801,710	0.33	1,456,388	539,249	0.37
Hemlock	1,199,699	455,662	0.38	1,390,885	576,440	0.41
Western Larch	1,225,956	636,631	0.52	1,121,347	459,643	0.41
Spruce	458,256	151,049	0.33	1,020,667	379,841	0.37
Oak	978,554	673,244	0.69	617,449	483,496	0.78
B. C. Spruce	267,917	70,685	0.54	547,919	202,234	0.37
Hard Pine	1,138,351	621,032	0.55	378,983	263,215	0.69
Chestnut	232,179	126,795	0.55	104,980	69,091	0.66
Red Pine	114,852	52,112	0.45	81,979	30,923	0.38
Elm	13,674	6,421	0.47	33,307	27,030	0.81
Beech	96,923	60,552	0.62	32,637	25,331	0.78
Maple	16,860	14,381	0.85	22,449	19,995	0.89
White Pine	.....	.....	....	14,165	6,446	0.46
B. C. Cedar	115,578	77,328	0.67	13,817	4,554	0.33
Cypress	.....	.....	....	13,246	5,873	0.44
Birch	24,736	10,447	0.42	11,018	5,293	0.48
Western Hemlock	479,113	148,725	0.31	4,019	1,246	0.31
Ash	503	216	0.43	106	46	0.43
Cherry	31	17	0.55	.....	.....	....

The cross-tie purchases in 1914 showed a slight decrease of 2.4 per cent. from those of 1913, while the decrease from 1912 to 1913 was 6.7 per cent.

The greatest decreases from 1913 to 1914 were with the western species Douglas fir, western larch, cedar, and hemlock, and the imported woods such as oak, hard pine, and chestnut. Of the twenty-one woods reported in 1914 eleven showed decreases.

Jack pine makes the most suitable tie material of the cheaper, more abundant woods of Canada. It has headed the list since 1911 when it took the place of white cedar a more durable wood, but one of which the supply is rapidly becoming exhausted. These two woods have formed the greater part of the ties purchased in past years, and together formed over half the total in 1914.

Average Prices For Five Years

The average prices paid for cross-ties by the railroads in 1914 showed only a slight increase over 1913. The prices in the last five years have been as follows: 1910, 38 cents; 1911, 39 cents; 1912, 44 cents; 1913, 43 cents; 1914, 45 cents.

In June, 1914, there were in Canada about 38,000 miles of steam railway right-of-way. On over 32,000 miles of this trains were in actual operation, and on the remainder ties at least were laid. The steam roads purchased in that year 19,196,208 ties, being about 500 ties to the mile. A large proportion of these ties were used for new construction at the rate of about 3,000 ties to the mile, and the remainder for maintenance of established lines.

These companies paid an average of 45 cents each for their ties as compared to 58 cents in the case of the electric roads. The steam railways with 98.9 per cent. of the total for 1914 purchased all the ties of western larch, western spruce, chestnut, red pine, beech, maple, white pine, and birch.

The electric railways in Canada purchased 207,438 cross-ties or about 1.1 per cent. of the total. These roads had a mileage of 1,561 in June, 1914, and therefore purchased ties at the rate of 133 per mile. These purchases were mostly used for renewals for which the demand is not so heavy as in the case of steam railroads.

The total number in this case is a decrease of 47 per cent. from 1913, while the average price per tie is the same. The greatest decreases were with western and eastern cedar and jack pine. Eleven woods were reported in 1914, and 15 in 1913, western larch, beech, maple, and white pine being dropped from the list.

Editor Canada Lumberman: Thessalon, Ont.

Thought your Export Number was just fine.—F. C. Hall, Manager, Canadian Department, Clemens-Hall Inspection Company.

Improvements Upon Quebec Driving Streams

In the third report of the Quebec Streams Commission, which has just been issued, there are several references to lumber possibilities and to the construction of dams which are of interst to the lumber trade. The work last year consisted chiefly of studies of the St. Francis, and Salmon Rivers, and part of certain rivers in the Abitibi district. It is proposed to carry out a scheme for regulating the run off from the watershed of Lake St. Francis. Six water powers on the River St. Francis are being utilized, one at East Angus and another at Bromptonville by the Brompton Pulp and Paper Company, and one at Windsor Mills by the Canada Paper Company. The other three are used for hydro-electric purposes. At the foot of the lake, water is stored for power purposes and to facilitate the driving of logs from Lake St. Francis to Lake Aylmer, a distance of six miles, by the St. Francis River. In this stretch the logs pass three different sluices. The volume of water used daily for log driving last spring from May 10 to June 15 was thirty-one square mile feet. The amount of timber taken from Lake St. Francis to Lake Aylmer was the largest in a single year and very likely will never be exceeded. Taking into consideration the sum which will have to be paid to take over the rights of the owners of the present storage on Lake Aylmer and Lake St. Francis, Mr. O. Lefebvre, C.E., the chief engineer, estimates the total cost of the scheme at $400,000.

In a report by Mr. J. A. Martin on certain tributaries of the rivers Noire and L'Assomption, in the county of Joliette, he states that the district is almost completely wooded; the forests near the rivers are all alike, the same kind of timber is found everywhere, and is for merchantable timbers, spruce, balsam, cedar and pine, named in the order of their importance. Nearly everywhere are seen traces of previous timber cuts and near the rivers the absence of large trees is noticeable. However, as little damage was caused by fire in this district, the forests are renewing pretty rapidly for merchantable timber, save in the case of pine, which has almost completely disappeared. On the other hand, balsam is becoming the most important timber. The cedar is of large size but is not generally perfectly sound. Apart from the timber regularly sold, there are here and there hardwoods which could be utilized, but which have hitherto not been available owing to the lack of transportation facilities. Mr. Martin refers particularly to birch, white birch and maple, which are, he says, in certain instances of remarkable size. On the Lavigne River the driving of logs can be carried as far as Lake Grande, at the outlet of which there is a dam 14 feet high, but not sufficient to store all the flood water. He was informed that the construction of another dam at the outlet of Lake La Galette, as well as on other lakes above, was being considered, together with the cleaning of the bed in the upper part of the river, so as to make possible the driving of logs. Mr. Martin suggests the building of dams on the Caisse River, the Harnois River, and on Lake Lavigne East in order to make possible the driving of logs. The Leprohon River is greatly used for driving pulpwood four feet long. It has been so used for several years past and the Lac Ouareau and Charlemagne Lumber Company have built a dam below the outlet of Lake Gourde to facilitate the floating of lumber bought from settlers in the vicinity. With a few improvements, the driving of cordwood would be possible from the head of the river. The Boule River runs through the timber limits of Mr. Wm. Copping and is used for the driving of logs, which is easily done on account of the many improvements made during the last few years. Five dams have been built at various points and a wooden slide has been installed for the passage of logs through the most important fall, which has a height of 140 feet.

Reporting on several rivers in the Abitibi region, Mr. J. B. D'Aeth, C.E., states with regard to the Bell River to the north of the railway that the forests have all been burnt. This area extends south of the railway for two miles after which there is good timber land, consisting chiefly of spruce, poplar and balsam with a scattering of jack pine. On the Harricana River, south from the railway to the head of Seal's Home Lake, a distance of about 33 miles, there are large timber areas which when cut have cheap and ready river transportation to the town of Amos, where two saw mills are established. The country generally is well timbered with spruce, poplar and balsam, except in the locality just south from Lake Obalski, and also at a point five miles north from this lake where the forest has been fire-swept for a distance of 5½ miles along the river. The banks of the Kewagama River are high and well covered with timber consisting mostly of spruce, balsam fir, poplar and a few jack pines.

The steamer Durley Chine is taking on lumber at Fraser Mills, B.C., to be delivered at Port Nelson on Hudson's Bay, for the Dominion Department of Railways and Canals. This is the first time in history that a steamship has undertaken a voyage from the Pacific Northwest to Hudson's Bay. The Durley Chine will make the trip by way of the Panama Canal and will reach Port Nelson about the middle of August.

Chair Parts and Dowels Wanted in London

The weekly bulletin of the Department of Trade and Commerce, for June 14th, contains an inquiry for chair parts and dowels. This enquiry, No. 764, refers to a London, Eng., firm open to place orders for considerable quantities of chair parts and also of dowels. Samples of the chair parts and of the dowels are being forwarded to the department where they may be seen on application when received. (Refer File A-810.)

The following particulars give the specifications for the chair parts and dowel sticks desired:—

Chair Parts.

Sample	Description	Quantity Required
A100	Four feet	4,000
100	Fronts	2,000
98	5-inch spindle	5,000
97	Leg	4,000
97	Stretcher side	2,000
97	Stretcher middle	1,000
96	Four feet	4,000
96	Fronts	2,000
95	Roman spindle	4,000
Y94	Sets consisting of 2 legs, 2 rails, 5 spindles	1,000 sets.

Manufacturers must guarantee bulk equal to samples supplied and the wood must be thoroughly seasoned. Stock to be supplied in birch, beech or ash. Manufacturers must state which wood they can supply and forward three or four samples with the quotations.

Prices must be quoted f.o.b. Montreal or other seaport, or better still, c.i.f. London or Liverpool. If f.o.b. Canadian port, the rate of freight must be stated from port of shipment to London or Liverpool.

Prices should be quoted per 1,000 pieces and must include cost of bags or rough cases.

Terms of payment.—Cash against documents, seven days sight draft through London bank, less 5 per cent. spot cash discount.

Dowel sticks.—⅝-inch, extra smooth, beech preferred, 12-inch, 13-inch, 14-inch, 15-inch, 16-inch, 18-inch or multiples.

⅝-inch, ordinary, in birch, beech, maple or white borch, 12-inch, 13-inch, 14-inch, 15-inch, 16-inch, 18-inch or multiples.

9-16-inch, extra smooth, 12-inch, 14-inch, 16-inch or multiples, in beech.

½-inch, ordinary, in beech, 12-inch, 14-inch, 16-inch or multiples.

7/16-inch, ordinary, in beech, 18-inch, 24-inch, 36-inch, 42-inch or multiples.

⅜-inch, ordinary, in beech or birch, 18-inch, 24-inch, 36-inch, 42-inch, 48-inch.

5-16-inch, ordinary, in beech, 18-inch, 24-inch, 36-inch, 42-inch.

¼-inch, ordinary, in beech, 18-inch, 24-inch, 36-inch, 42-inch.

¼-inch, 5/16-inch, ⅜-inch, 7/16-inch, ½-inch x 2½-inch quote for 10 to 20,000 of each size, also same in grooved dowels.

For dowel sticks, quote per 1,000 pieces; the quantity required is 5 to 10 tons; samples must accompany quotations.

All quotations should be made f.o.b. Canadian port, or better still c.i.f. London or Liverpool. Freight rates must accompany all quotations.

Cash against documents, seven days sight draft through London bankers, less 5 per cent. spot cash discount.

Imports of paper and paper products into Canada in the year ended March 31, 1915, decreased about $3,000,000, while Canadian exports increased about the same amount, according to an Ottawa despatch. During the year imports of paper and paper manufactures amounted to $5,764,379, compared with $8,043,368 the preceding year. In the year just closed $4,032,345 represented imports from the United States, the remainder coming from the United Kingdom. Paper exports for the year ended March 31, 1915, were worth $15,509,582, compared with $12,686,896 in 1914. Of last year's total, $12,879,204 was sent to the United States.

The Brompton Pulp & Paper Company's drive of 45,000,000 feet of logs and pulpwood went down the St. Frances River past East Angus, P.Q., on June 12th, with a crew of 100 men as drivers.

French Duties on Print Paper and Woodpulp Reduced

A circular letter of the Customs Branch of the French Finance Department dealing with the reduction by 60 per cent. of the duties on print paper and mechanical or chemical woodpulp intended for manufacture into print paper has been forwarded to the department by the Hon. Philippe Roy, the Canadian Commissioner General at Paris.

The following table will show a comparison of the old and the new duties on both of the above commodities:—

Print paper weighing more than 30 grams (about 1 oz.) per square metre—Frs. 4.00 instead of 10.00 per 100 kilos gross (220 lbs.)

Woodpulp.—Mechanical pulp—0.40 instead of fr. 1.00 per 100 kilos gross (220 lbs.); mechanical wet, 0.20 instead of fr. 0.50 per 100 kilos gross (220 lbs.); chemical, 0.80 instead of frs. 2.00 per 100 kilos gross (220 lbs.)

The only regulation with respect to print paper provides that the consignments will have to be delivered in bond to the printing office of a newspaper, under the supervision of the customs authorities.

With reference to woodpulp, consignments will have to be delivered in bond to a paper mill. The importers will also have to sign an engagement with bond attached to return in three months a certificate provided by the management of a newspaper to the effect that the paper mill, to which the woodpulp was delivered, sent to the newspaper a corresponding quantity of news print. The quantity of paper was fixed at 50 per cent. of the total weight, in the case of wet mechanical pulp and 90 per cent. as regards dry pulp.

Responsibility for a Broken Dam

The Court of Review at Ottawa has given judgment upholding the judgment of a lower court for $300 in favor of the plaintiff in the case of the Therrien vs. W. C. Edwards Company, Ottawa. The plaintiff operated a sawmill on the Nation River and a dam to furnish power for it. The defendants had a boom for logs just above the fall where the plaintiff's mill was situated. In May, 1912, the water rose and the plaintiff expressed his fear that the defendant's boom was not satisfactory. The latter's agent stated that he was about to release certain logs. He attached an additional rope to the dam. This broke and the logs rushed out carrying away the plaintiff's dam. Chief Justice Archibald in giving judgment said that if the boom had held and the logs had been allowed to pass out in the usual manner, not all at once, it would have been easier upon the plaintiff's dam. The defendant had a right to float his logs and would not have been responsible for damages if, through inefficiency, the plaintiff's dam had given out. Manifestly, proper care had not been taken. The rope had broken and this constituted a fault on the part of the defendant. Each party should regulate their actions in such a way as not to cause the other damage.

The action brought by Edward Lowry and Mrs. F. A. Loring against J. R. Booth, of Ottawa, for $25,000, on account of the destruction of a dam on the Montreal River near Latchford, which the plaintiffs were constructing for the Dominion Government, has been dismissed by Mr. Justice Middleton, at Osgoode Hall, Toronto. The plaintiffs claimed that the destruction of the dam was caused by one of the defendant's log drives. Mr. Booth stated that he had never been notified that the dam was being erected, and that any damage that might have been done was the result of spring freshets and floating ice. He made a counter claim for $10,000 for undue obstruction of the river. Both the claim of the plaintiffs and the counter claim of the defendants were dismissed.

Chief Justice Meredith, recently dismissed without costs the suit of T. W. Rushworth against P. Percy Johnston for $15,000 alleged to be due for finding a purchaser for pulp lands, paper mill, and water power in Wolfe County, Quebec.

Serious forest fires were reported in the district near Scotstown, P.Q., early in June, and at latest reports they were of a very dangerous nature on account of the very warm and dry weather.

Editor Canada Lumberman: Portland, Ore.

We wish to congratulate you on your Export Number which has just come to hand. We shall be very glad indeed if you will send "The Timberman" an extra copy for our files.

Again congratulating you for your splendid achievement in presenting very clearly the possibilities for the extension of the Canadian lumber trade, we are,

Yours very truly,

The Timberman,

George M. Cornwall, Editor.

Editor Canada Lumberman: Quebec, P.Q.

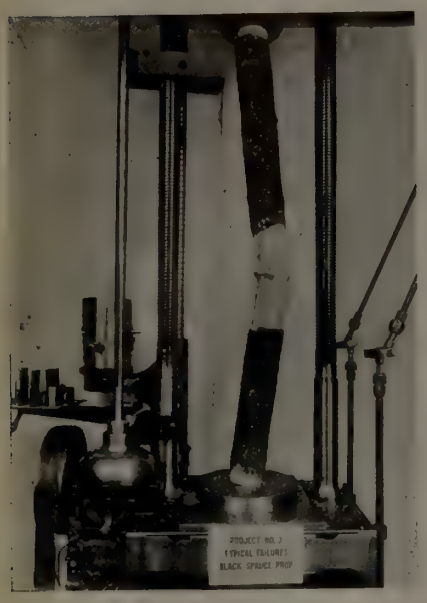
Allow me to congratulate you on the excellence of your Export Number. . . . . The publication itself will no doubt be generally appreciated for its merits and suggestions. It comes at just the right time, and will certainly attract attention to the possibilities of enlarged trade, not without good results. It must have entailed considerable anxious thought and judicious management. I have failed to find one blunder, inaccuracy or error.

Yours very truly,

Edward Harper Wade.

Testing Qualities of Canadian Timbers

Important Investigations Commenced by Forest Products Laboratories Will Give Valuable Information to Lumbermen



Testing mine timbers.

The conditions of trade in Canada are making it necessary that we should obtain much more exact information both as to the quantities of material that we have available, and as to their qualities and adaptation to particular uses. This is particularly the case in connection with the forest products of the Dominion, as they have, up to the present, had very little attention from scientific investigators, and there is little information of a definite character in regard to the qualities and possible uses of Canadian timber which is available. As Canada extends her trade in foreign markets and comes into competition with other countries this necessity becomes more marked. For instance, the Government of the United States have, through the Forest Products Laboratory of the Forest Service, made very careful studies of the qualities and adaptability of the various species of woods of the United States, and this information, from authoritative Government sources, is available for advertising the products of that country in foreign countries. Many of the species of trees in the United States are the same as those in Canada, but information obtained in regard to such trees in the United States is not necessarily applicable to the same species in Canada, and if the Canadian exporter, desirous of stating the qualities of Canadian timber, can refer only to information which has been obtained in regard to timbers in the United States, he is very likely to advertise those timbers in preference to Canadian timber, and has no definite information in regard to Canadian timber to set off against them.

The Dominion Government has recognized this difficulty and has made provision for meeting it by establishing Forest Products Laboratories at Montreal in co-operation with McGill University where investigations to obtain definite information in regard to the qualities and adaptability of Canadian timbers are being carried out.

Laboratory Tests of Canadian Woods

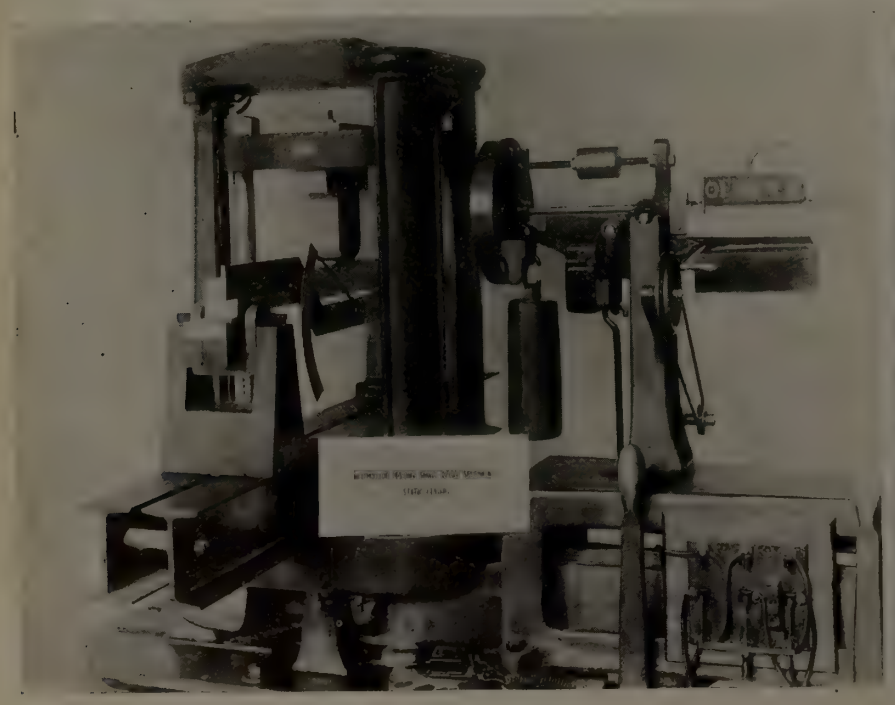
Laboratory work was commenced last September on Project No. 1, "Mechanical and Physical and Structural Properties of Wood Grown in the Dominion of Canada." Douglas fir is the first species under test and representative shipments of logs were received last summer from three typical localities for these species—the mountain type from Morley, Alberta, and Golden, British Columbia, and the coast type from Abbotsford, British Columbia. A comprehensive series of tests has been undertaken on small clear specimens cut from the trees according to a well defined scheme. Eight strength tests are employed—static bending, compression parallel to grain, compression perpendicular to grain, shear, tension, impact bending, cleavage, hardness. This is supplemented by determination of physical and structural properties, such as moisture content, specific gravity, shrinkage, rings per inch, per cent. summerwood, fibre dimensions, cell structure, etc. For any one species the variety of tests indicate the variation of strength values of the wood from butt to top of tree and from heart to sapwood, as well as the variation of timber from different localities.

The test results to date indicate that the fast growing Douglas fir of the coast has great strength, being very little lower in strength than the best long-leaf southern pine, and surpassing all remaining conifers for structural purposes. The slower growing and smaller mountain types are more affected by knots and other defects and their strengths vary from 70 per. cent. to 80 per cent. of that of the coast fir. In general, the strength of Canadian Douglas fir compares very favorably with that of the United States Pacific Coast and the tests confirm the fact that our Douglas fir is a first-class structural material.

The investigation will be extended to include all the important wood species, taking first those which are of greatest commercial importance. It is felt that the establishing of authoritative test results on the various Canadian species will do much to remove the unfounded prejudice against some of our woods and will aid in extending the use of Canadian-grown wood, both at home and abroad.

Investigators of Mining Timbers

A second investigation undertaken last fall is Project No. 2, "Strength Functions and Physical Properties of Nova Scotia Mine Timbers." This work is being done in connection with a comprehensive investigation of Nova Scotia timbers under supervision of the Forestry Branch. The purpose in carrying on mechanical tests is to compare the strength value of various Nova Scotia tree species in the commercial sizes of pit props and booms used in mining operations. A first shipment of nearly 300 specimens was taken from the storage yard of one of the mining companies in Cape Breton and included the three species commonly used—Black Spruce, Red Spruce, and Balsam Fir. Owing to the fact that the seasoning conditions and origin of this material were uncertain and that over half the specimens showed fungus infection to a greater or less extent, tests were made on this shipment to learn conditions of actual commercial timber rather than to carry out the original purpose of accurately comparing species. The results already obtained show that the Nova Scotia species exhibit very good strength values and are very well suited for use in the mining industry. Conditions indicate however, that great advances will be made by properly controlling storage of



Testing a small clear specimen of Douglas Fir.

Pulp and Paper Department of Testing Laboratories.

these timbers before use in the mine. Testing is now in progress on a second shipment of some 450 specimens freshly cut in Nova Scotia. The species include Black Spruce, Red Spruce, Balsam Fir, Yellow Birch, White Birch. and the trees were chosen to represent average growth conditions and to insure the receipt of sound material. The props in 6 ft. lengths are submitted to compression tests parallel to grain, and the booms in 13 ft. lengths are tested in static bending, these tests being comparable to service conditions. Half of the material will be tested in the green condition and half after thorough air seasoning. The information obtained on growth characteristics and strength values of these various species in commercial sizes should throw much light on the resources of the eastern provinces for future supplies of suitable mine timbers.

Pulp and Paper Materials Investigations

Next to the lumber industry the pulp and paper industry is the most important in connection with forest products, and steps have been taken to arrange for equipment that will enable the Department to make very thorough tests of Canadian materials and improvements in methods for making both pulp and paper. In the Forest Products Laboratories there has been provided perhaps the most complete experimental laboratory for pulp and paper that there is anywhere and an experienced staff has been installed. This division of the work has the hearty co-operation of the Canadian Pulp and Paper Association who recognize the value of such investigations, and it is expected that they will bring about results which should give Canada its proper place as the chief producing country for pulp and paper.

Some of the matters which will be taken up for investigation immediately will be the characteristics of Canadian paper-making fibres, comparison of balsam fir and spruce for paper-making purposes, technical study of the sulphite process, sulphite waste liquor. utilization of sulphite screenings, different methods of beating paper pulp, manufacture of pulp from different British Columbia species. Work is now being begun on all these projects and they will be carried to conclusion at as early a date as possible.

South Africa's Wood Imports

Imports of wood, manufactured and unmanufactured, except furniture, into South Africa during 1913 and 1914 were valued as follows:—

	Value 1913.	Value 1914.	Increase or Decrease.
Total	1,236,016	892,806	—343,210
British Empire	188,716	97,919	— 90,797
Foreign Countries	1,047,300	794,887	—254,413
Canada	59,532	63,558	+ 4,026
United States	246,491	294,502	— 48,011
United Kingdom	87,108	63,121	— 23,987
Australia	37,480	27,077	— 10,403
Sweden	541,198	374,602	—166,596
Norway	188,785	115,753	— 73,032
Russia	40,520	43,924	— 3,404

The chief imports from Canada were of unmanufactured pine, the value of which in 1914 was £41,305, an increase of £9,381 over the value of the imports during 1913. In the Weekly Bulletin of the Department of Trade and Commerce, W. J. Egan, Trade Commissioner at Cape Town South Africa, reports as follows:—

The import of wood of all kinds into South Africa during 1914 was $1,690,000 less than in 1913, and the decrease is on every kind of wood. In pine and other unmanufactured wood (except oak and poplar) the imports from Canada have increased.

The conditions prevailing in South Africa during the year had a serious effect on building operations which accounts for the decreased imports more than the restriction of the supply from the North seas due to the war. The prospects are very good for a revival in the building industry and as stocks in the yards are light the demand will be active.

The tables of imports as shown above indicate the source of supply with which Canadian lumber manufacturers must compete and it does seem as if this is a most opportune time for Canada to increase her exports of poplar, cedar and pine in the rough and flooring, and ceilings should secure a much larger share of the trade.

The South African Railways department have in view the possibilities of securing some supplies of ties from British Columbia and in aspen logs for match making, one fairly large order has already been placed in Canada.

In manufactured wood the imports from Canada have improved on handles but the supply of Canadian handles should be much larger. Of box shooks, Sweden has controlled the trade for a number of years. However, the conditions are now favourable for Canada to secure a larger share of these imports. Trade inquiries for large quantities have been submitted within the past three months.

A Time For Aggressiveness

The business situation in the Eastern markets it seems to me has reached a point where the tide has changed and started to flow the other way. In spite of the unusual conditions existing to-day, wars and rumors of more wars there is considerable activity in the retail trade, and some of the yards in Brooklyn are having a large volume of business, and while prices are not at all what they should be, there is some improvement.

During the month of May my firm had next to the largest month's business we have had since we have been in business. I am also pleased to say there seems to be the opinion that trade will be good during the summer months, and that in our city it is not confined to any one particular line.

This, of course, means that if trade holds good prices are bound to advance, due to the fact that yards and manufacturers are not carrying their normal stocks, the tremendous advance in ocean freights which are taking all available bottoms, a 5 per cent. advance to the railroads, and the fact that many mills have been shut down on account of prevailing prices.

This means there is a silver lining to the dark cloud which has been hanging over the wholesale trade for some time.

I am an optimist, and believe it is the time of all times to be awake and aggressive. The world needs optimism in its business, it wants to be cheered up in these troublesome times.

This is the time of all times when we have got to be loyal and back with our lives, if necessary, the things we think and know to be right.

I once heard the Reverend Dr. Talmadge say that if a captain of a ship started for the other side, and only steered in that direction one day in the week, he would never reach his destination.

The man in business to-day without some definite object, without some goal toward which he is striving, is in about the same boat as the captain.

High ideals in business are absolutely necessary to success.—R. J. Perrine, before the National Hardwood Lumber Association.

Good Prospects for B. C. Fir in West Indies

The Canadian Consular Agent at Port of Spain, British West Indies, is of the opinion that the opening of the Panama Canal affords opportunities for trade with Western Canada which are not being overlooked by merchants. He states that if Douglas fir has the qualities which will enable it to replace pitch pine, now secured from the United States, there will be an excellent market for it in the British West Indies. The first large cargo of British West Indian sugar is about to be despatched by the new route to British Columbia, and lumbermen will recognize the importance of the new conditions as affecting return cargoes of lumber. The superiority of Douglas fir is being brought to the attention of the Consular Agent in order that he may distribute information concerning it to local buyers.

In connection with the foregoing, the Forest Branch of British Columbia calls attention to an article on the West Indian lumber trade in the June 1st number of the Canada Lumberman, in which we quote an American business man, located at Kingston, Jamaica, who says:—"A great deal of the pitch pine imported here from the Southern States is very defective. We would not use it in the United States; you would not use it in Canada. It is used in Jamaica because there is nothing to compete with it. I would like to see your British Columbia Douglas fir coming in here." There is apparently no question but that B. C. fir would sell extensively in the West Indies if properly pushed.

Editor Canada Lumberman: Grand Rapids, Mich.

We wish to compliment you on your Export Number of the Canada Lumberman & Woodworker. This is as fine a piece of work as any special number of any trade paper we have ever seen, and a whole lot better than a great many. The articles contained therein are very interesting, and there is a great deal of valuable information contained in the issue

Yours very truly,
Van Keulen & Winchester Lumber Company.

Editor Canada Lumberman: Ottawa, Ont.

The Export Number of the Canada Lumberman appears to be an admirable production and I think it cannot fail to be of value to the important industry to which it relates.

Yours faithfully,
R. Grigg, Commissioner of Commerce.

Canadian Wood Goods in Great Britain

Expansion in Trade Resulting from the War—The Increasing Trade in British Columbia Timbers—Manchurian Pine Competition

The chief wood imports from Canada into Great Britain are the subjects of the leading article published in the Annual Issue of "Timber," the well-known London, Eng., Journal. In the course of this interesting article "Timber" says:—

A result of the great war gratifying to those in sympathy with the expansion of Colonial trading is the impetus it has given to the export of timber to this country from Canada. For many years it has been the chief source of supply of yellow pine to the United Kingdom, but only to a modified extent has its enormous resources in spruce been called upon, due to a great extent to competition from the Baltic, which, with the advantage of a cheaper freight, has hitherto proved too formidable a competitor to entirely overcome. In the case of pine, Canada still holds its commanding position, though not without, in recent years, having had its supremacy challenged by the products of Siberia, New Zealand, and California. It is outside the scope of this article to enter into the relative merits of all these comparatively new varieties of pine, and no doubt considerable divergence of opinion exists among experts on the point, but the most that is urged on their behalf by those responsible for their explotation is that they claim favourable comparison with the older and better-known Canadian products, and there the matter may be left. Though held in high esteem, it has to be admitted that Canadian pine has lost ground in recent years, not because of any loss of faith in its many merits, but because the steady upward movement in values which has occurred in recent years has forced housebuilders and other large users of it to avail themselves of cheaper substitutes. There is evidence that in many instances the woods so substituted have proved unsuitable, and as a result Canadian pine has once again come into favour, and looks as if it might be entirely reinstated in public estimation, provided shippers refrain from forcing up prices unduly, as they have done in the past.

They, like other people, hae got to recognize that beyond a certain point it is impossible to force the price of any product, no matter what its merits may be, without gravely jeopardising its popularity.

They had a lesson in the case of waney pine timber—so long a favourite with shipbuilders for decks—which went practically out of use altogether a year or two ago, when something like 6s. or more was demanded for it. To their surprise, the discovery was made that shipbuilders could do without yellow pine decks, and as a matter of fact it was only when some modification was made in the price that a sale could be found for it. It is possibly correct that the price is not too high, in view of the special trees selected for making prime waney boardwood and the increasing cost of having them hewn by experts; but it is practically certain, if it be found that the price will not bear any modification, it must inevitably result in a considerable curtailment in the use of this wood by shipbuilders, who have hitherto been its largest users. Possibly some day, instead of the log being exported to the United Kingdom, the finished deck may be supplied, as has occurred in the case of pitch pine and Oregon pine. Certainly a well-manufactured deck at a moderate price would command a ready sale in the United Kingdom if any one cares to give it a trial. In recent years the demand for first quality yellow pine deals has fallen away to such an extent that now it remains the merest shadow of what it was, and in this case also high prices are responsible. Any call which exists for Canadian first quality pine is supplied for the most part by good sidings (as they are termed in the trade), from inch to two inches thick, and made up in a general way of about 75 per cent. first quality and 25 per cent. seconds, but even in the case of these the constantly advancing prices have adversely affected the demand.

The explanation of the gradual evolution which has occurred may be safely attributed to the increasing tendency to sacrifice quality to price, which has resulted in the lower grades of deals and sidings coming more and more into favour every day. One result of the change is that there has been a certain loss of proportion in the values which used to exist between the higher and lower grades, the price of the latter having advanced considerably, while the former has remained more or less stationary, which would appear to suggest that the production of the best quality has to some extent exceeded the demand for it, so far at all events as the United Kingdom is concerned.

Siberian Pine

In recent years a serious competitor to Canadian pine has made its appearance from Siberia, which, though at first meeting with a certain amount of prejudice, has made considerable progress in public favour. By its detractors it is stated to be inferior to the best Canadian pine, though, on the other hand, there are many whose opinion is entitled to carry weight, who consider that the best of it is equal to the finest Canadian product. There can be no question that the resemblance between the two is very close, though possibly the Siberian variety is hardly so uniform as regards colour and freedom from resin as the other—no great importance in the case of most of the work it is used for. It is claimed that it can be produced cheaper than the Canadian pine, and also that it is better graded for quality, quite sufficient to make itself a rival to be reckoned with. The Russian Government, it is understood, is making every effort to encourage and develop the export of their vast timber resources, so that it is reasonable to infer that the Siberian pine trade is likely to undergo considerable expansion in course of time.

Siberian yellow pine is, possibly, rather too loose a description to apply to all the shipments of yellow pine from Vladivostok. Users of this wood will, before long, discriminate between Siberian (Eastern) yellow pine and Manchurian yellow pine in the same way as the trade has come to discriminate between British Columbian Douglas fir and the Oregon pine south of the Puget Sound. The variety is known locally as Kedr, which, literally translated, is cedar, but botanically, the tree is known as Pinus Koraiensis and Pinus Mandshurica. It is established, beyond all question, that the pine growing in that part of Manchuria between Honderhedze and Modaoshee is incomparably superior to that which is to be found in the Priamur district. In fact, by a process of careful selection of logs before conversion, and elimination of resinous planks at the time of grading, it is possible to turn out a shipment which shall practically equal the productions of the white pine from North America and Canada.

It is interesting to trace the development of the import into this country from the beginning. The first parcel arrived in London some eight years ago, and was landed in the West India Docks. For a year or two prior to that event, intermittent rumours had come to the ears of a few members of the trade as to the possibility of obtaining supplies from so distant a part of the world, and the very few who paid any attention to these rumours decided in their minds that the class of wood obtainable was the same variety as the White Sea redwood, and this was a quite reasonable supposition, for the reason that Siberian redwood was being exploited by Archangel shippers, and exported from that port, and although thousands of versts separated the definite sphere of operations from the prospective, it was a fact not taken into account. That pine from Siberia must, of course, be Pinus sylvestris, was the thought of those who troubled themselves to think about the matter at all. Consequently, little attention was given to the reports, because it was felt, and rightly so, that it would never pay to export timber of the White Sea redwood description from Vladivostok. Here one should mention parenthetically that the Manchurian and Priamur pine should not be confused with the Western Siberian Red pine shipped via St. Petersburg and Archangel, which, although an excellent wood, is not the soft yellow pine with which we are dealling.

Spruce

As already indicated, the Canadian spruce trade largely benefited by the exporting facilities from Russia and the Baltic ports generally having been so much curtailed owing to the war, and as a result prices have advanced to an extent hitherto unknown in its history. Prices, which had ranged from £9 to £10 10s. for an ordinary specification of St. John deals, advanced rapidly to something like £15 to £16 per standard, while the demand, which was stimulated largely by Government orders, more than kept pace with supplies. Owing to the sharp advance in freight rates, shippers did not in every instance reap the entire benefit of the inflated values, but those who had the fortune or foresight to secure room by the liners at 40s. to 50s. per standard must have made very handsome profits indeed. As to the future of prices, there is naturally considerable divergence of opinion, owing to the many conflicting elements governing the situation, but, on the whole, the majority appear to favour the likelihood of their being maintained throughout the year, unless in the improbable event of a collapse in freights, of which it may be said that there is as yet not the least indication. High though prices are, it cannot be urged that there has been any falling off in the demand for packing-case material, nor is there likely to be in the absence of an equally cheap and suitable substitute for spruce. It has frequently been urged that the existing trade between Canadian ports and this country could be considerably developed if some attempt was made to give a larger proportion of 18 feet and up lengths, but apparently this is not a matter easy to arrange, or else manufacturers do not consider the British markets of sufficient importance to warrant them from moving off the beaten track of the 14 to 16 ft. average they usually supply. No doubt, if a preference was given to the Colonial product by this coun-

try it, would help materially in the direction of developing this trade, as under ordinary conditions the cheaper freights from the Baltic prove too severe a handicap to Canadian shippers. Whatever prospects the future holds for a scheme of Colonial preference, there is at present no reason to suppose that such a contingency is anything other than remote.

Though dealing with Canadian spruce, it is perhaps permissible to refer to the growing export of that from Virginia to the British markets. The demand for it has increased to a great extent within the past six months, partly on its own merits, partly because of the sharp advance in prices of the Canadian and British Columbian products, and shipments this year from Baltimore (through which port most of it comes), have been on a much larger scale than previous years, with every prospect of still further development.

Birch

Next to spruce the principal export from St. John and Nova Scotian ports generally is birch, which, unlike spruce, comes forward to this country in the log and plank, there being quite a good outlet for it in both shapes. It is a wood that for long has been sold too cheap relative to its value, and why it should not have appreciated in price with other less indispensable woods is not easy to explain.

No doubt it is at present higher than at any other period in its history, but the increase is largely represented by the extra expense involved in freighting. Buyers who have been in the past accustomed to pay from £10 up to £13 per standard for the best quality of Quebec planks, do not take kindly to the prices now current, as can be understood.

As regards logs, the supplies sent over last year to this country were not sufficiently adequate, and, as a consequence, something like a famine has prevailed, while values have reached a point never previously recorded in the history of birch. Imports this season will be unusually costly, not on account of the free-on-board price having advanced to any extent, but to transportation charges.

British Columbian Products

The import of timber from British Columbia, which is, comparatively speaking, a modern event, has in recent years grown to considerable proportions, and continues to gain in popularity.

One of the many points in its favour is the fine lengths which can be supplied in both pine and spruce, and it is due almost to this fact alone that it has to a very great extent usurped the position so long held by hewn pitch pine in the United Kingdom markets.

For many purposes Oregon pine is admirably suited, such, for example, as general housebuilding and shipbuilding requirements, though, like other woods, it no doubt has its detractors. It has been successfully tried for ships' decks in place of pitch pine, than which it is somewhat cheaper (in itself a very important consideration), and there would appear to be a great future before it for this purpose amongst others. The decks which come forward have been, on the whole, well manufactured, the sizes in most demand being 3 x 5 in. and 2½ x 5 in., cut an eighth to a quarter-inch full, to allow for shrinkage, with an average length of at least 28 ft., and that they have proved a success may be gauged from the fact that the demand for them is a steadily growing one with the United Kingdom. It is not claimed for it that it makes such a fine deck as Canadian pine, for example, but against that there is the important consideration that it costs ever so much less, while it compares more than favourably with the other in so far as freedom from knot defects is concerned. For spars it is in much request, owing to the great lengths which can be supplied practically without defects and, as already indicated, it has to a large extent displaced hewn pitch pine, which up to the introduction of Oregon was chiefly used for spar purposes. For the cheaper grades of logs and planks there has also been considerable expansion in the demand for building and structural purposes generally, due largely to the increasing cost of Canadian yellow and red pines. The import of spruce from British Columbia has made progress in recent years, the best grade (which forms the bulk of the arrivals into England) being used for many purposes hitherto identified with the best quality of Canadian pine, and having the advantage over it of being much cheaper, of better dimensions, and singularly free from defects. It is in special request for aeroplanes—this particular variety of spruce, in the estimation of experts, possessing advantages over others in the matter of breaking strain, while a matter for further consideration is that it can be supplied in clear grade at a moderate price.

Another wood from this district introduced into this country, though only meeting with modified success, is clear. It is quite an attractive looking wood, but has never become popular here, which may be attributed to it being short in the grain, though it may possibly possess other disadvantages. It is said to be popular in Canada and the States, but has not so far worked its way into favour here. A few shipments of Columbian yellow pine deals and sidings have also been imported into the United Kingdom, and met with a reasonable amount of success. It is a matter of 20 years since imports from the Pacific Coast were first introduced to the British markets, and in that time it has developed into a large trade, with every appearance of still further expansion. As most people are aware, Australia is the largest market for West Coast products, if for no other than geographical reasons; but progress is being made in many other directions, such as South Africa, Japan, and the Argentine, and, with the opening of the Panama Canal, it is bound to become in course of time one of the great sources of supply of timber to the markets of the world. Since the outbreak of war, the increasing freights from Vancouver, which are now as high as £15 per standard to United Kingdom ports, have helped to adversely affect business, but this can only be of a temporary character.

Will Push B. C. Fir on Atlantic Seaboard

The welcome news has been made public that the Empire Lumber Company, which owns 56,000 acres of Douglas fir timber in the vicinity of Cowichan Lake, Vancouver Island, is preparing to increase its logging capacity from 50,000,000 feet to 80,000,000 feet yearly, and before the first of June will likely have another Lidgerwood overhead skidder at work, the plant at present in use comprising two Lidgerwoods and two donkeys. The announcement was made recently by President William G. Moore and Managing Director George D. Bouton, both of Philadelphia, on the occasion of a business visit to Victoria and the company's logging headquarters at Cowichan Lake.

"I am hoping," said Mr. Bouton, "to build up a business of from 100,000,000 to 200,000,000 feet on the Atlantic seaboard. In the cities of that seaboard the value of the British Columbia and North Pacific fir is being appreciated, and it is going to displace other woods to a considerable extent in interior and exterior finishings. It is realized that the Douglas fir will force its way into use, and to meet that demand the company is preparing and laying its plans."

"The next point arising is the plan to be adopted for cutting those logs. At Crofton we consider we have one of the best sites for a mill possible, and the action taken by the company may be either in the form of absorbing some of the existing mills, or else of construction of our own plant. It is the definite intention of the company to manufacture lumber itself, and one of the objects of the present visit is to make some milling arrangements. Meanwhile the opportunity to cut at Genoa Bay will be fully used and in addition to the 6,000,000 feet a year for the Toronto harbor works, that mill having a capacity of 30,000,000 feet, the export trade will be maintained as the market warrants."

Transportation of the lumber when cut," he said, "is a most important feature, and for that purpose a director of the company has been secured in Lowel L. Richards, a member of the great British shipping firm of Bowring & Company, Limited, which represents that firm in the United States. Mr. Richards will look after the transportation end, and we hope after the war is over that the release of tonnage will enable us to ship satisfactorily."

The imports of log timber into Belfast, Ireland, for 1914, as shown by the return of the sworn timber measures of the port, indicate a total of 821,887 cubic feet, being a falling off of 99,306 cubic feet as compared with the previous year, which was the lowest record since 1909. This drop was mainly in teak and pitch pine; yellow pine and Riga timber showing considerable increases in comparison with the preceding year. At the outbreak of the war Riga and Petrograd were immediately eliminated as shipping ports, which greatly affected Belfast importers, large quantities of timber being ordinarily carried from the former port. Moreover, the addition of timber to the list of articles scheduled as contraband of war had the effect of practically shutting off the main Swedish supplies from the Baltic. Owing to the increased demand for tonnage, freights rose to record figures, and it became almost impossible to charter for wood shipments.

During the early months of the year prices were low, providing only a small margin over cost for local importers; but later, owing to increased consumption of timber caused by work in connection with the war, values advanced. At the close of the year prices for spruce deals, flooring, and sheeting stood at figures far above those which had ever been entertained. Packing-case makers were somewhat affected by reason of the high prices ruling for their materials.

Editor Canada Lumberman: Montreal, P.Q.

I wish to congratulate you on the excellence of your issue of June 1st. In my opinion this "Export Number" is the best you have ever issued, the illustrations and set up generally being so attractive and the number containing such a large amount of decidedly valuable information. I am sure the circulation of this number the other side of the water cannot but be beneficial to the Canadian Lumber Trade.

With best wishes for your continued success, I remain,

Yours very truly,

C. A. Spencer.

Cost Keeping for the Retail Lumberman

By W. V. Coakley

I was for many years manager of a retail lumber yard and I will endeavor to give you herewith the systems of costs which I employed while in this connection:

The first and most important step is to have the various kinds of material segregated on the books. For instance, a separate account is necessary for the lumber, another for posts, another for shingles, etc. This in order to know exactly how much of each item was sold during the year's business. It is a well known fact that many of the small retail yards whose owners are always in the office personally, have no system at all for keeping a check on the various items sold. This often causes considerable loss to the proprietor, and for this reason one of the first considerations should be a comprehensive cost system and careful inventory, at least once each year. The stock which is carried by a concern of any kind is the same as so many dollars and cents and should be counted and looked after just as carefully as the actual money.

The yard with which I was identified handled lumber, lath shingles, posts, coal, sash, doors, mouldings, nails, roofing, etc. We found it desirable to open a merchandise account and handle all sash, doors, mouldings, nails, roofing, etc., through the one account. Below is given a fac-simile of our journal heading:

This arrangement can, of course, be changed to suit the individual needs of an establishment.

In handling accounts, it is, as stated elsewhere in this article, necessary to open a separate account for each kind of material. At the end of every month the total sales of each item should be posted on the credit side of the account, and the total purchases should be posted on the debit side of the account. In this way an accurate check is kept on the amount of each of the various materials handled.

In order to keep careful track of the expenditures for maintenance, it is necessary to open various expense accounts. The number and kind can be applied only to an individual case, as each yard has its different commodities to sell. Some handle roofing, wall board, etc., and some do not. Others have different side lines. All of these side lines can be taken care of in a merchandise account or a separate account can be opened to look after them; it depends entirely on the will of the management which method shall be used. I used only a small number of accounts as the business was a small one. Our expense was divided into a labor account and a general expense account. In most yards it is advisable to have a teaming account, a yard labor account and an office labor account as well as several other specified expense accounts. This can be determined by the size of the expenditures for these different purposes. We ran all teaming labor through our labor account and carried accident insurance on our men accordingly. The office labor, etc., was simply run through the general expense account. In a case such as suggested in the question, it would be necessary to open a labor account and divide it into four units, as follows: Yard labor expense, factory labor expense, office labor expense, and glazing labor expense. In this way each separate department can be made to stand on its own bottom. This is a very desirable point in the conduct of any business, as it can then be readily ascertained at the end of each year exactly how much is made from the output of each unit of the business.

In arriving at the cost of handling lumber per thousand it is, of course, first necessary to reduce everything to feet. This can be accomplished by following the methods as set forth here. In the case of posts, take the nearest sized square and figure the number of feet therein. In the case of lath, figure that ten lath make one foot of lumber. In the case of shingles, figure that five shingles make one foot of lumber. In the case of sash, doors, mouldings, etc., it is more or less guess work, but with a little careful thought this stock can be approximated into feet also. By adding the total of all these items, it is possible to find exactly how much, in feet, has been handled during a given period. This total can be divided by the total expense and in this way the exact cost per thousand feet for handling all material during the same period can be determined. It may not be desired to find out how much it cost to handle material in total, and should it be desired to find out only what it has cost to handle the lumber end of the business, the answer can be arrived at in the same way, by using only the total feet of actual lumber handled and dividing that by the total lumber expense, which would be contained in the yard labor and expense, and a proportionate amount of the office labor and expense. This method can also be applied to any of the various other representative accounts.

The case suggested in the question would require accounts as follows:

Lumber, lath, shingles, posts, merchandise, glazing.

These accounts to be the representative or stock accounts, where a complete record of all the sales or purchases should be posted. There should also be opened expense accounts as follows: Yard labor, office labor, factory labor, glazing labor, yard general expense, office general expense, factory general expense, and glazing general expense.

It must be understood that it is necessary to have a personal property account and an improvement account, where all items of personal property and improvements must be posted; they should not be posted to the expense account. For instance, if a horse is purchased, he is not expense, but personal property; he is an asset. If a shed is built, that is not expense, but improvements; it is also an asset, in the same way that a horse, wagon or other necessary equipment is an asset. The personal property account and improvement account

Date			Folio	Total	Lumber		Laths		Shingles		Posts		Merc-hand'e	Coal	
					Feet	Amount	Pcs	Am't.	Pcs	Am't.	Pcs	Am't.		Tons	Am't.
Jan.	15	Am't. For'd.	✓	75 26 13	21 11 2	91 21 95	100	50	¼	1 00	85	25 50	1 52 13	30	22 5 25

Suggested Ruling of Page for Cost Keeping for Retail Lumbermen.

should, of course, have about ten per cent. deducted each year for depreciation, and this will make up for such items as a horse dying and a new one being added to personal property. If it were not for this deduction, the company would have two horses charged up and only one to show for it. You do not have the dead horse charged to your personal property account, because you are deducting something each year to make up for the added asset which the new horse will be after his purchase.

The same applies to a rebuilt shed. It is to be remembered always, that it is better to carry insurance on too many assets than too little.

It is well while on the subject to say a few words regarding insurance. This detail should always be considered the most important and vital part of the expense. It is really not an expense at all, but an investment. One fire with no insurance or not enough insurance would cost the company more than enough to pay for the insurance for a good many years. My employer is a man who actually seems to find pleasure in paying for insurance. He never had but one fire, and that a comparatively small one. However, he feels perfectly safe at all times and does not worry at all about this sort of misfortune, for the reason that he always carries enough to reimburse him in full should another fire wipe out the yard. It is to be hoped that any retail lumberman who reads this article and who has not been carrying enough insurance will, for his own good, take out enough more to play safe, at once. We never know who will be the next to suffer by fire.

This general outline of a cost system can, of course, be enlarged upon, or the essential parts can be taken and a system suiting the individual taste can be put into use. All the necessary suggestions are, however, handled here, and by using this method as a foundation, a very satisfactory cost system can be worked out.

A despatch from Winnipeg, Man., states that Fred H. Jones, for whom the police have been searching for nine months has been arrested at Portland, Oregon, on a charge of absconding with $11,000 from the Imperial Elevator & Lumber Company at their branch office at Conquest, Sask. He will be brought back to Canada to stand trial, as he has waived extradition.

Relation Between Dealer and Mill Man*

By L. D. Dewey

The subject assigned me covers a situation which has come about so gradually that most of us have failed to realize it, and we have consequently made no efforts to adjust our business to the changed conditions. For over six years I have been "the relation" between forty-seven retail yards, and about twice as many mills; this has enabled me to obtain a very fair view of the situation.

While the changed condition between the dealer and the mill man is simply a case of evolution, and not the fault of either, still it rests upon both to do what they can to help the situation. Both of us have our shortcomings and we should endeavor to correct them in order to co-operate more effectively in advancing our mutual interests. I will enumerate a few of the faults, as I seem them, beginning with the mill men.

Faults of the Mill Men

There is nothing radically wrong with the mill men: we do business with about sixty-five concerns and my troubles are few. The one criticism I can make is that retail conditions have changed, but as yet, the mill men are not adjusting their business to conform.

In the olden times the retailer carried immense stocks. He usually bought about twice a year, and by reason of his excessive stock, he could allow the mill plenty of time for shipment. In those days the sales were largely for cash; now, the conditions are just reversed, modern competition has almost eliminated the cash sale, and the dealer is forced to work on light stocks and put the big end of his investment into outstandings. To do this, he must turn his stock often, and the faster he can turn his stock, the greater are his chances for success. But, in order to handle his stock in this manner, he must have the co-operation of the mill man in the matter of quick shipments.

Long Delays Unwarranted

In my opinion, there is no excuse for an order being delayed over three weeks. A "rush" order should move in less than ten days, and the average order should not remain at the mill over two or three weeks. Some mill men may think this a little strong, but in support of my statement, I will quote from some records in my office. The average time of shipment was 13 days on 1,157 cars purchased in 1914. These orders were placed with twenty-seven different concerns, twenty of whom averaged better than fifteen days, the highest average being twenty-five days. This should prove conclusively that quick shipments can be made. I consider the sales agent mainly at fault for slow shipments, as he should not quote on, or accept business, that does not show on his stock sheet, and in shipping condition The mill man also seems to be of the opinion that a thirty or sixty day shipment should satisfy anyone. Some mills are very peculiar in their manner of shipment; frequently we have an order that has been out for thirty days or more, and which we have been tracting religiously; the mill replying with first one excuse and then another. When all patience is exhausted, and you wire for car number or cancellation, it is only a few hours before a return message brings the car number. I never could understand how some of these hard orders can be loaded so quickly.

"Grades" and "Off-Grades"

While we are dealing with the mill man, it would be well to dwell a little on grades—or we might say off-grades. As a rule, I find the grades very good, in fact, they are considerably above the association standards. The fact that the mills do grade above the standard is what causes the trouble on claims. When a bad car does slip by and the mill calls for an inspection (they usually do, for the average shipping clerk never makes a mistake), it is the dealer who is the loser thereby. The inspector grades on the rules, which forces the dealer to accept a grade that is inferior to what he has been receiving, and what his trade is, in turn estimated to receive. After the inspector leaves, it is, therefore, necessary for the dealer to re-grade to "custom" grades, and pocket his loss. Another thing which makes an inspection distasteful to the dealer, is the fact that usually from four to eight weeks elapse before the said official arrives. A dealer should not be expected to hold off-grade longer than two weeks.

Adjusting Claims

In adjusting claims, I think that circumstances should govern the settlement rather than a fixed set of rules. I also believe that the salesman is the logical man to do the adjusting—the salesman knows his customer, knows the value of his business to the firm, and in a settlement is better fitted to make an adjustment satisfactory to all parties concerned; thereby leaving the dealer in good humor. An official inspection has a tendency to make the dealer feel as though he had received the worst of the transaction. Claims are bad business at best, and it is much easier to lose a dealer's trade than it is to regain it.

One of the worst conditions that we have to contend with, is the shipment of wet and green stock. Here is where the sales agent again is responsible, as he should not accept orders for stock not in shipping condition. Green stock works an especial hardship on the smaller yard; he has to stick it on the outside, and when dry, is forced to pay extra drayage to get the lumber into his bins. The customary charge for sticking is 50 cents per thousand, and I contend that the dealer not only loses in the handling of the lumber, but it leaves him with a class of stock that is slow sale. In the country yards, where the trade pick their lumber, it is much easier to sell a bright No. 2 grade, than No. 1 which has become black and mildewed.

Another little question:—why are there so many different ways of working flooring; instead of V backs, hollow backs, rough backs, etc., why can't we have one standard and all the mills adopt it?

Never Cancel Under Three to Four Weeks

In criticizing the mill man I do not overlook the fact that there are always two sides to every question, the dealers are undoubtedly often unjust to our mill friends. One especial practice is so prevalent that it is now almost considered a custom. I refer to concellation on account of price. **I have known of instances where an order is placed, cancelled and replaced, on the same day, and all to save four or five dollars on the car. That is not right. If you make a bad buy take your medicine like a man. You will profit by your experience and on your next purchase will probably use more judgment.** I never cancel under three or four weeks, and then only after having wired the mill for car number, and thereby giving them a chance—if they have not made shipment within that time, they deserve that the order be taken away from them.

Misrepresentation is Injurious

Another extremely bad practice of the retailer is misrepresenting price to, or misleading a salesman. **Should you buy a car of 8 and 10 ft. flooring for $17.50, don't tell the next salesman that so and so is making $17.50 price on flooring—such practices as this tend to demoralize the market, which in turn reacts against the dealer. In such misrepresentation to the salesman, you really do yourself an injury, for when he leaves your yard with the low market information, it simply enables your competitor to buy that much cheaper.**

I would like to see some stability to the market, and a uniform quotation, such as we have on wire, nails and various other commodities.

The present practice of salesmen leaving prices with the dealer is bad. Whether the yard is in the market or not, the average salesmen either quotes or leaves a list of specials; these are shown to the next salesman, who promptly goes them fifty cents better, and so on. Still we wonder what is wrong with the market. Of course, supply and demand primarily govern the price situation, but it is also a fact that the little things above mentioned do play an important part, especially at a time when there is a temporary lull in buying.

Gain the Confidence of a Salesman

Never try to put one over on a salesman, rather we should endeavor to gain his confidence. Remember that where you have one opportunity to best the salesman, he has just ten times as many chances to get back at you. You will get stung and you will never know how or why it happened. The lumber salesman, as a class, is a good clean fellow, and can be of much assistance to you; while one cannot always give him an order, we can give him a little of our time, and I find it a very good way to keep informed.

Co-operation is Essential

In my opinion, what few differences we do have with the mill man are usually due mainly to a lack of understanding between us. There may be a few arbitrary ones, but the other class is largely in the majority, and it is easy to know with whom to deal. The mill man and the retailer should work more closely together, our interests are in common, and there is a great task set out for us. We should endeavor to remold public opinion, as to the true lumber situation. It is impossible to tell the average man that there is no such thing as a lumber trust; all imagine that we make two hundred per cent. profit, while in truth there are few other lines of business that could exist on the percentage of profit made on lumber. I consider the retailer primarily to blame for this, by selling a man what he asks for, instead of ascertaining for what use the material is intended, and then selling him the grade best suited for the purpose. If the average purchaser is to build a chicken coop, he will ask for "the best" boards, and is charged $2.75 or $3.00; this man really wanted No. 3 stock, and would have been satisfied with both the grade and the price. However, it is just another case of the customer feeling that he has been overcharged, and attributing the whole situation to the "lumber trust." It is mainly the small sales that tend to create such an impression. We must get away from this, and the sooner the better, for such a situation is just what the mail order house wants. You never see the mail order people quoting higher grades; they ship the lower grades with prices to conform, and in a majority of cases the victim thinks he has

* Address delivered before the Lumbermen's Association of Texas.

saved big money; the dealer could have furnished the same grades for probably less money, and then make a reasonable profit.

It is up to the dealer to change public opinion as to high prices, combinations, etc. The saw mills also have a task before them. They sit idly by and allow wood substitutes to poison the public mind against wood construction. **It is true that a few of the substitutes have some merit, but ninety per cent. of them are frauds, and are made to go simply because of their publicity departments and the passiveness of the lumber producer. Would it not pay the mills to start an educational campaign?**

In summing up, I think that the modern relations between the dealer and the mill man consist mainly of a better understanding, also a co-operation between the two in the matter of intelligent dealing with the public, in an endeavor to regain their confidence. With proper efforts this should be easily accomplished.

"The Saw in History"

Henry Disston & Sons, Inc., Philadelphia, have recently put out a 64-page book entitled "The Saw in History." It handles in a comprehensive way the development of the saw from its prehistoric origin to its present highly perfected form. Practically every type of saw is covered, descriptions of the more modern developments being especially complete. The text is supplemented with profuse illustrations.

The preparation of the book involved a vast amount of research work among libraries, private records, original manuscript, etc., and "The Saw in History" is claimed to be the first complete chronological record of the development of this tool.

The facts are presented in an interesting readable manner and its perusal will prove valuable to anyone, especially to those in intimate touch with the present-day application of this universal tool.

A copy may be had free of cost by application to Henry Disston & Sons, Inc., Philadelphia, Pa.

B.C. Timber in Old Lands

Editor Canada Lumberman:— Vancouver, B.C.

Sir,—I see by your valuable paper that Chief Forester MacMillan is going to investigate the opportunities of selling British Columbia lumber in the Old Country. Now, speaking from my experience of twenty-five years in the building trade and cabinet trade and other woodworking industries, I feel that they will welcome him with open arms, as he can supply them with the goods for which these trades have been looking for many years. Take for instance the building trade, the material now supplied by the Swedish and Norwegian mills has been deteriorating for a number of years. Most of the lumber from those countries is small and inferior. The price also for lumber has been rising for years. Then again, for cabinet work, where is a better wood than British Columbia cedar? Most of the cabinet work in the Old Country is veneered, and I am sure it would find a very ready sale if put into the market in a proper state and price, for it is very difficult now to obtain a suitable wood for this purpose. As yellow pine of any width has almost disappeared, and whitewood of good quality has gone to such a price, it is almost as cheap to use common mahogany. The cedar being of such good width, light and open grain, makes it an ideal wood for cabinet work, and I am sure that the large cabinet manufacturers would only be too ready to use this if it could be supplied at reasonable cost, which I am certain can be done, if only the lumber concerns of this province will push this matter in the same way as the Swedish and Russian firms have done. Of course, the lumber would have to be special cut for this market, but I am sure that once the woodworkers of the Old Country, especially, London, were brought face to face with these products there would be no trouble to dispose of them at good prices.

As to manufactured lumber, the doors here in British Columbia are the finest I have ever seen, and I may say that I have seen and had dealings with thousands. The ordinary doors sold to ordinary builders are mostly Swedish and these are made up wholly of small stuff, 12-inch panels glued and matched together, and never without a dozen knots in each door. That is the reason that builders doing contract work have to manufacture their own doors, as architects will not pass the Swedish goods because they are poor quality. Here again they would have to be made in a style to suit the country, but this would cost nothing. Then mouldings, cut out of cedar, I am sure would be welcome, and quite equal to the best yellow pine.

I know well the firms handling the Swedish goods, also the Beaver brand American pine work. I am also acquainted with most of the largest timber merchants and cabinet firms, and I feel sure that it needs only the courage of our lumber companies to open this market to themselves, and good results will be obtained. An agent who knows his business, and also able to get introductions to the architects should be able not only to render good service to the manufacturers, but to British Columbia and the Old Country.

Yours, etc.,

ONE WHO KNOWS THIS BUSINESS.

Educating the Consumer

By Geo. E. Watson

As to methods of educating the consumer I will say little. Probably no two men would follow the same lines in mapping out a campaign for educating the consumer of lumber, for it takes imagination to handle such affairs, and where imagination exists in proper volume it is usually individualistic. Advertising, printed matter, motion pictures, lectures, anything which will reach the consumer will have its educational influence, but it is essential that such publicity, first of all, be truthful.

Unhappily, the very few examples of successful lumber publicity have made too many lumbermen believe lumber is not a commodity which can be successfully exploited to the consumer, and the error of this belief can only be proven by actual demonstration. Lumber advertising can be, and has been made successful, but none of you will ever get anywhere if you continue to wait for some good Moses to come along and do for you those things which you should do for yourselves.

In discussing that phase of this subject which pertains to the results of educating the consumer I must state, without disparagement to other woods, that cypress alone has followed a consistent and persistent campaign of education, so far as the consumer is concerned. Red gum was the first to attempt this line of work and deserves full credit for being the first, but its efforts have been sporadic. White pine and fir made a very good start and apparently lost interest and it is only now that white pine is preparing to attempt the work again. Yellow pine, as a whole, is beginning to get busy in a very pleasing and satisfactory way, and in the past it has done excellent work, but in altogether too limited a way. Arkansas soft pine deserves much credit for what it has done and all of the participants in this advertising will tell you that nothing they have ever done has brought them so many benefits as their advertising. In a very limited way hemlock, birch and oak flooring have attempted to reach the consumer with more or less success, and North Carolina pine is preparing to enter the field. At the same time none of these campaigns have been as continuous and as large as the cypress campaign.

Because of my greater familiarity with it, I must base my remarks on the results of educating the consumer upon the cypress campaign, and I will tell you a story which might also be taken from the Arabian Nights. Please do not liken this story unto "Ali Baba and the Forty Thieves," as it bears more similarity to Aladdin, in that the wonderful lamp was properly rubbed and there has since been a glare of enlightenment to the group of lumbermen who are philanthropically bearing the burden of expenses which brings easier business conditions upon the unfaithful as well as upon the faithful.

For a number of years I have heard remarks from other lumbermen similar to: "You cypress people certainly have a cinch." It is an astounding fact, however, that in 1908 and 1910 the producers of cypress were confronted with a situation more serious than has ever beset the path of any group of lumbermen. It had become apparent that cypress was steadily and rapidly decreasing in demand. In other words, its market, which by a very large majority, was a market to factories, was going back upon it. Other woods, which would serve the purpose for doors, sash, blinds and other factory uses, were nosing cypress out of the race, not, perhaps, because of merit, but because of price.

Here was a wood which claimed for itself certain qualities which were present in few other woods and which, because of these qualities, should be marketed on merit alone, sinking to the level of entering into price competition with other woods. Further than this, there was a tendency toward a rapid increase in production.

Here was a situation which caused extreme anxiety. If the factory trade were retained the producers would be forced to name prices on par with the rapidly sinking level. Those owning cypress stumpage would be inclined to get out from under, either by the sale of it or by sawing as rapidly as possible an asset which was declining in value. By permitting things to drift (which is the usual habit of lumbermen) where would cypress have been to-day? What would have been the prevailing price and how many disastrous failures would have occurred?

But there was one other possible market for cypress, which would involve the changing of cypress from a factory lumber to a retail yard lumber. An investigation of this possible outlet, however, indicated that, no matter what the price, the average retail dealer was not inclined to burden himself with another wood and also burden himself with the effort of trying to educate his customer to the virtues of this wood. There were other woods which he was already handling and with which his customers were already familiar. Why should he be the good angel to help out cypress? There as but one ray of light in this very beclouded situation.

If the actual consumers were educated and if they were made to differentiate in the buying of lumber so they would use woods in their proper places, there certainly should be a demand for cypress. If this demand were created upon the part of the actual consumer, the retail

dealer would, as a good business man, supply his customers with what his customers insisted upon having. First, however, he would have to be shown that the cypress manufacturers intended to create a ready-made market and that this market would receive consistent and continued attention from the cypress manufacturers. No retail dealer would care to put in a stock of cypress if only two or three customers asked for it, and the efforts to educate the consumer ceased. If such a campaign were attempted it must be one which would increase as time passed and would be continuous, for the reason that there is a rapidly changing list of prospective home builders in the country.

It was therefore, with ideas of this sort that the advertising campaign for cypress began. At first it was mild, so far as expenses were concerned, but it has gradually increased in volume and the year 1915 will witness greater publicity for cypress than did the preceding year. Confidence was restored to the manufacturer himself, his egotism, so far as his product and his prospects were concerned, increased by leaps and bounds; his sales gradually changed from straight cars of one item of factory stock to those highly desirable mixed orders from retail dealers.

Actual figures on this switching of trade certainly prove the advantage of educating the consumer. Since 1908 the production of cypress lumber in the United States has increased more than 47 per cent. On the basis of 1908 production the factory trade has decreased more than 33 1-3 per cent. The development of a new market has been gradual, but has fully kept pace with the loss of the old market and the increase in the production. No wood manufactured into lumber in the United States can show as straight a line on average prices during this period as can cypress. The sales of the association mills during the year 1914, which was not a brilliant year, were within 4 per cent. of the production, and the mills during 1914 ran on remarkably full time.

In view of the experiences of nearly all lumber manufacturers, aren't the statements I have just made rather remarkable? Can you give any other reason for the success of cypress than the fact that the consumer was constantly receiving his education? Just think for a moment on what would have been accomplished by lumber as a single proposition if the public had been educated as to the virtues of lumber. To speak more specifically of the cypress publicity campaign, it should be borne in mind that it was education which was needed by the public, and it was with this idea that the Cypress Pocket Library, which is in reality a series of text books, was prepared. While large masses, running into the millions of copies of other and cheaper printed matter was distributed in this educational campaign, the Pocket Library itself was regarded as of a higher order and it was not issued except upon special written request. It was desired that these volumes only go to people who asked for them, as in that case they would be studied, but there was an advertising campaign which was calculated to create this desire. More than seven hundred thousand volumes of this library have thus far been issued on written request, and the present position of cypress, despite the difficulties which confronted it five or six years ago, is sufficient indication of whether or not these little red volumes have done their duty.

In order to learn conclusively the present attitude of the retail dealer with reference to cypress, and with a knowledge of what that attitude was five months ago, I have during the past two months addressed a large number of letters to retail dealers asking a number of specific questions, comparing their trade in cypress during 1914 with their trade during 1913. In doing this I realized that it was an unfair comparison, in that 1914 was not as brilliant a business year as was 1913. To these letters I received six hundred and ninety-one replies, and it is a remarkable fact that these are replies to more than 90 per cent. of the letters which were written. These letters were addressed to retail dealers scattered throughout the country from New England on the East, Michigan, Wisconsin, Minnesota and South Dakota on the North, Nebraska, Kansas and Oklahoma on the West. I have analyzed these letters and have placed them where they belong, in six groups.

1.—Those letters indicating a gain in the sales of cypress, whether or not other woods showed a gain	342
2.—Those letters indicating that the sales of cypress were fully as great as during the preceding year, whether or not other woods lost ground	205
3.—Those letetrs indicating that general business was dull and that cypress trade lost proportionately with that of other woods	45
4.—Those letters indicating that cypress lost ground because other wodos decreased remarkably in price and cypress did not	24
5.—Those letters indicating that the sales of cypress decreased more than the sales of other woods	49
6.—Those letters stating specifically that cypress was not handled	26
Total	691

The fact that 547 replies, out of a total of 691, indicated that cypress has held even, or has gained ground during a dull year compared with a fair year, is certainly proof that educating the consumer gets results. We know what would have been the result of this inquiry five years ago, as the large majority of retail dealers would have stated that cypress was not handled.

In conclusion, I am forced to state that in my belief there is no big line of business which is doing as little as lumber to either maintain the demand which already exists, or to extend that demand. If any one of you were looking for a business in which to invest surplus funds would you for a moment consider a business in which those who were the leaders were perfectly aware of the fact that they were losing ground, and yet were doing nothing to protect themselves? Isn't the mere idea nonsensical on the face of it, and can you blame the public or the financial interests when you desire to float bonds or to borrow money and get turned down? Will anyone be such a philanthropist as to aid those who absolutely refuse to aid themselves?

Schroeder Company Increases its Holdings

The Schroeder Mills and Timber Company, of Milwaukee, Wis., owners of 150 square miles of pine and mixed timber lands in Ontario, and of 21,000 acres western pine lands in Oregon, who are affiliated with the John Schroeder Lumber Company, of Milwaukee, Wis., have concluded the purchase of some 23,000 acres of long-leaf pine lands in Manatee County, Florida, from The Myakka Company, of Charleston, South Carolina. The timber acquired by this purchase will be sold to a milling concern on a cutting similar to the contracts favored by the United States Forest Service, wherein the operator pays for the timber monthly as it is cut. The Schroeder companies are now disposing of considerable stumpage by this method, which has proven advantageous to both the holding and milling companies.

Lumber Vessel Torpedoed

The Norwegian Barque Bellglade which sailed from Halifax, N.S., on May 21st with 550,000 superficial feet of lumber, shipped by I. H. Mathers & Sons was sunk by the German submarine U-35 on June 13th. This is the first ship from Halifax to have met with such a fate. The cargo was insured. During the past three months 45 vessels have sailed from Halifax with lumber for the United Kingdom, and all but the Bellglade have successfully landed their cargoes. Of these, 26 were squared-rigged; 13 three-masted schooners; 1 four-masted schooner, and 4 steamers. The Bellglade was built at Glasgow in 1877 and was formerly known as the Michael Berentsen and the Zeta. It was 6,040 tons net, and was last owned by A. Monsen, of Tonsberg, Norway.

Hon. N. M. Jones, general manager of the Partington Pulp & Paper Company, St. John, N.B., reports that not more than 1,500,000 feet of the company's drive on the Nashwaak River will be hung up. The quantity successfully brought out will be between 15,000,000 and 16,000,000 feet, which is all the company requires, and more, for its present season's operations. The rear of the Nashwaak drive will not be brought into the rafting grounds until the new dam is built at Lower Lake. This dam is to be 20 feet long and 20 feet high, replacing one which was carried out this spring. Another new dam is to be erected by the company this year at Nashwaak Lake.

The Norwegian barque Caraca, the first oil-driven square-rigged vessel which has ever entered the port of St. John, N.B., arrived on her maiden voyage from Norway in ballast on June 12th to load deals for a trans-Atlantic port. The Caraca is propelled during unfavorable winds by an oil engine which develops 286 h.p. The barque can travel 9½ miles an hour with the engine in operation. The passage from Norway to St. John occupied 19 days. It is reported that a fleet of square-riggers owned by Norwegians will be equipped with motors.

During the month of May 52,500,287 feet of logs were scaled by British Columbia scalers in the Coast district. This is the highest total for the year, although in March and April over 45,000,000 feet was scaled each month, and 43,000,000 feet in February. During the corresponding months of last year the scale average was only about 30,000,000 feet.

W. D. Galvin, president of the Galvin Lumber Company, Winnipeg, Man., recently returned from a business trip throughout a large portion of Western Canada. In an interview Mr. Galvin said:—"A lumberman is as much interested in crops as a grain merchant. I have been travelling through Western Canada for the last eight years and I think I can truthfully say that I have never seen the crop looking so well at this time of the year. A lot of rain has fallen in Alberta and Saskatchewan, and there was considerable moisture last fall. Again, the farmer has taken every precaution and put the land in first-class shape. The result of it all is that the country is looking splendid. In some places I saw wheat 8 or 10 inches high."

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Basswood Wanted

No 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Wanted for Immediate Shipment

One car load 4-in. dry No. 1 Common and 1st and 2nds Birch. Describe stock fully as to age, lengths, widths and percentage of 1st and 2nds. Quote best cash price delivered f.o.b. cars Chicago, Ill. 13

For Sale–Lumber

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

For Sale

PILING, any length in Spruce, Red, White and Jack Pine or Hardwood.
Telegraph Poles, Ties and Fence Posts. Square Cedar and Hemlock up to 12 in. x 12. Correspondence solicited.

ANGUS PRENTICE & SON,
189 Arthur Street,
9-14 Toronto, Ontario.

FOR SALE
Norway and Jack Pine—Mill Run

1 x 4/5 x 10/16 ft.	850,000 ft.
1 x 6	410,000 ft.
1 x 8	67,000 ft.
1 x 10	14,000 ft.
2 x 4	158,000 ft.
2 x 6	161,480 ft.
2 x 8	306,222 ft.
2 x 10	144,537 ft.
2 x 12	26,849 ft.
Norway Pine Culls	
1 x 4 and up x 10/16 ft.	1,200,000 ft.

DEVON LUMBER CO.,
5t.f. Ottawa, Ont.

For Sale—1914 Cut

40,000 ft. 1 x 10/12-in. Mill Cull White Pine.
40,000 ft. 1 x 4, 12/16 ft. Box & Common White Pine.
90,000 ft. 1 x 4 and up, Mill Run Spruce.
25,000 ft. 2 x 6, 10/16 ft. No. 1 Spruce.
48,000 ft. 2 x 4 to 8 in., 10/16 ft. No. 1 Spruce.

A close price will be made on any item.

THE ELGIE & JARVIS LUMBER COMPANY, LIMITED,
13 Toronto, Ontario.

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale
Dry Stock

10 cars 8/4 Hard Maple, No. 1 Common and Better.
10 cars 12/4 Hard Maple, No. 1 Common and Better.
10 cars 4/4 Hard and Softwood. Sound Crating.
10 cars 4/4 Basswood, runs well to white.
5 cars 4/4 Soft Elm.
3 cars 4/4 Brown Ash.
10 cars 6/4, 8/4, 12/4 and 16/4 No. 2 and 3 Common Maple.
25 cars 4/4 to 8/4 Hemlock, all sizes.
5 cars 4/4 Mill Cull White Pine.
5 cars 4/4 Mill Run White Pine.
The above stock is well milled and end trimmed, good widths and lengths.
Prices low to a satisfactory buyer.

HALL BROS.,
15-15 174 Mutual Street, Toronto.

Wanted–Employees

Advertisements under this heading two cents a word per insertion. Minimum charge 50 cents

Wanted correspondence with young, capable man to take position as foreman or chief millwright in a general sawmill, capable of installing machinery as per blue prints, etc., and taking charge of full organization work. Apply Box 215, Canada Lumberman, Toronto.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

Position wanted as Band Sawyer, best of references. Will be open for engagement after July 1st. Box 216, Canada Lumberman, Toronto. 13

Position Wanted

Band sawyer wants position. Single or double cut. Best of references. Used to fast rigs. Can come at once. Box 204, Canada Lumberman, 119 Board of Trade, Montreal. 11-14

Highest grade accountant, 20 years' experience in public works and lumber, now chief accountant in Ontario, wants change, Ontario or elsewhere. 40 years old, married. Highest references and securities. Box 210, Canada Lumberman, Toronto. 12-17

Salesman or office manager wants position. Twelve years' experience in wholesale. Sales manager for several years. Accustomed to Eastern Canada, New York and New England trade. High grade man, highest references. Speaks and writes both languages; good correspondent. Age 34. If you want a real capable and conscientious man, lose no time. Start immediately. Apply Box 150, Canada Lumberman, Montreal, Que. 13

For Sale–Machinery

Generator For Sale

C. G. E. make—203-35 K.W. With Base. Pulley and Rheostat. Never been used. Is absolutely new.

VICTORIA WHEEL WORKS,
13 Galt, Ont.

Machinery for Sale

One Double Surface Planer.
Power-Feed Rip Saw.
12-in. Moulder.
Heavy Flooring Machine.
Vertical Boring Machine.

A. J. LINDSAY,
11-13 92 Pembroke Street, Toronto.

Woodworking Machinery For Sale

1—M. 80 Cowan Dowel Machine; 2—10-in. four side Moulders; 1—M. 190 Cowan hollow chisel mortiser; 2—26-in. revolving bed, double surface planers; 1—26-in. Whitney smoothing planer; 1—No. 802 Canada Machinery Corporation Shaper; 1—42-in. power-feed band rip saw; 1—40-in. McGregor Gourlay pedestal band saw; 1—32-in. Disc Sander with boring attachment; 1—20-in. American wood scraper; 3 Ideal Variety Saw Tables with boring attachments.

H. W. PETRIE LIMITED, Toronto.

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.
1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3½-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Business Chances

Wanted

To buy white pine timber limits. Box 214, Canada Lumberman, Toronto. 13

Timber Limits For Sale

Can be quickly and profitably disposed of by advertising them on this page. This is where buyers of timber property look for opportunities to invest. If your "ad" is here the investor will see it. Canada Lumberman, Toronto, Ont. tf

Miscellaneous

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Do You Want to Buy or Sell?

If you wish to purchase or dispose of a particular stock of lumber or logs, a mill property or timber limit, or some second-hand machinery, the CANADA LUMBERMAN AND WOODWORKER will bring quick returns. Use our "Wanted and For Sale Department."

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including:—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Tenders for
Pulpwood Limit

Tenders will be received by the undersigned up to and including Wednesday, the fifteenth day of September, 1915, for the right to cut pulpwood on a certain area situated north of the Transcontinental Railway, west of Lac Seul and south of English River in the District of Kenora.

Tenderers shall state the amount they are prepared to pay as bonus in addition to the Crown dues of 40c. per cord for spruce, and 20c. per cord for other pulpwoods, or such other rates as may from time to time be fixed by the Lieutenant-Governor in Council, for the right to operate a pulp mill and a paper mill on or near the area referred to.

Such tenderers shall be required to erect a mill or mills on or near the territory, and to manufacture the wood into paper in the Province of Ontario—the paper mill to be erected within such time and in such place as the Lieutenant-Governor in Council shall direct.

Parties making tender will be required to deposit with their tender a marked cheque payable to the Honourable the Treasurer of the Province of Ontario, for ten per cent. of the amount of their tender, to be forfeited in the event of their not entering into an agreement to carry out the conditions, etc.

The highest or any tender not necessarily accepted.

For particulars as to description of territory, capital to be invested, etc., apply to the undersigned.

N.B.—No unauthorized publication of this notice will be paid for.

G. H. FERGUSON,
Minister of Lands, Forests and Mines.
Toronto, June 5th, 1915. 12-17

TIMBER CRUISES
Timber Estimates, Forest Surveys and Maps.
D. E. LAUDERBURN
1 Madison Ave., NEW YORK, N.Y.

J.M. & D.M. Croteau
Civil Engineers, Quebec Land Surveyors and Draughtsmen
81 St. Peter St., Quebec, Que.
Phone 2718
are prepared to examine and report on forest properties anywhere. Forest surveys, Logging maps, Timber estimates, Water Power, Water Storage, Topographical plans, Water supplies, Park Works, General plans for village sites and Private Estates. Railroad location and construction. Roads and Rivers improvements. Good information concerning Quebec Timber and Mining lands, cheerfully given.

HOBART & CO.
CHOICE
Southern Hardwoods
Cypress, Kiln Dried North Carolina Pine
Send Us Your Inquiries
53 State St., BOSTON, MASS.
Yard at Prison Point
Cable Address "Hobco Boston."

Miscellaneous News of Interest to Lumbermen

Plans for a proposed wharf to be built at Bathurst Basin, N.B., have been filed by the Gloucester Lumber and Trading Company, with the Public Works Department in Ottawa.

John Carew, M.P.P., Lindsay, Ont., reports that his logs have come out this year more satisfactorily than in any previous year. All of the logs are out of the creeks and ready for towing to the mills.

Reports from Bridgewater, N. S., state that many large sailing vessels are taking on cargoes of lumber at that port for trans-Atlantic shipment.

It is estimated that over 2,103,000,000 feet board measure of timber is available in the district tributary to the Kettle Valley Railway in B.C. The timber consists of Douglas fir, yellow pine, cedar, spruce and tamarac.

A despatch from Revelstoke, B. C., states that the Dominion Government has consented to the appointment of an official to look after the enforcement of the dumping clause in connection with the tariff on lumber imported into Canada.

Mr. B. M. Howe and Mr. Chas. Reynolds, of Patten, Me., visited New Brunswick points during the third week in June. Mr. Howe is connected with the International Paper Company, and the object of his trip was to purchase pulpwood for that company.

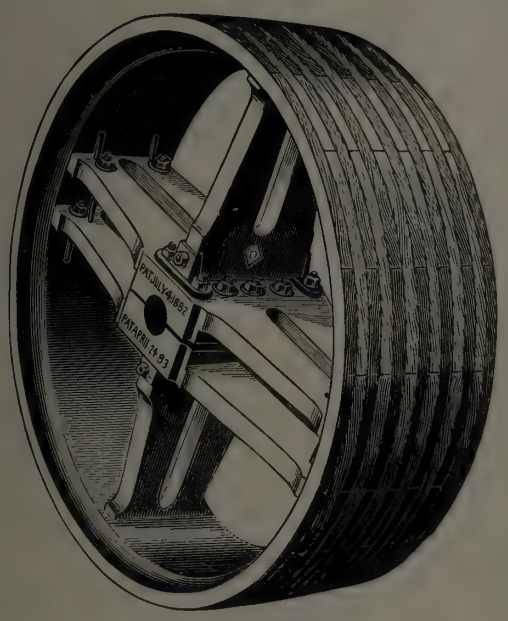
A report from Detroit, Mich., states that the Hamilton Transportation Company have purchased the fleet of the Edward Hines Lumber Company, of Chicago. The Edward Hines steamers are well-known on the North Shore of Georgian Bay from which they have carried many cargoes of lumber to United States ports.

A proposal is being discussed at Ottawa to form a company of lumberjacks for service in connection with the British forces in Europe. Ottawa lumbermen are reported as stating that a company of 200 or 250 men could easily be raised. Usually the men come in from the woods about June 15th to arrange for fall employment, and with the lumbering business so quiet as it now is, a large number of these men would probably be ready to volunteer for the front. They would make excellent soldiers on account of the experience they have had in the bush and their great ability to endure hardship.

Mr. C. Ross Cameron, sales manager of the Wm. Hamilton Company, Limited, Peterborough, Ont., recently resigned his position to go to the front as commander of the machine gun battery, 3rd contingent. Mr. Cameron has been with the Wm. Hamilton Company for about fourteen years, during most of which time he was associated with the 57th Battalion. Mr. G. R. Munro, chief engineer, has assumed the duties of sales manager in addition to those of his own department.

As showing how seriously the scarcity of bottoms is affecting the export lumber industry of British Columbia at this time, it is only necessary to state that quite recently Hon. W. R. Ross, Minister of Lands, was authorized to place another order for 100,000 creosoted ties to be delivered in India. An initial order for 150,000 treated fir ties was filled last year by the Dominion Creosoting Works, who have a large plant on the North Arm of the Fraser. The quality of the shipment favorably impressed the Indian railway experts, the result being a second order and an intimation of others to follow. The company has an ample supply of creosote, but is unable to handle the shipment because a vessel cannot be chartered.

The United States consular agent at Almeria, Spain, has been investigating the stave possibilities at the request of Pacific Coast manufacturers. In his report Mr. Yost expresses his belief that a very good market for fir staves for making small grape barrels, such as are used in great quantities in Spain, may be opened up via the Panama Canal. Something like 2,000,000 grape barrels are set up each year at Almeria alone, the staves being manufactured in Western Spain and Portugal and set up where used. The staves are 20 inches long, three inches wide and one-quarter inch thick, and are packed in bundles of 32 or 33 staves. Practically all the lumber used in connection with the vineyards of the country is imported, and it would seem there is an opportunity here for the markets extension committee of the British Columbia manufacturers.



Wood Pulleys for Saw Mills

We make this wood split pulley especially for the saw-mill trade.

We nail and bolt the rims.

The arms and hubs are **Hard Maple.**

Lighter, Stronger and Better than Iron or Steel

The wood rim presents a better belt-surface by 33⅓ per cent than any metal pulley.

Belts may be run slacker, and give more power.

They are a permanent asset, and cost less to start with.

We guarantee every pulley sold to be suitable for the work to be done. Millions in use everywhere.

SOLE MAKERS

Dodge Manufacturing Co., Limited

Toronto — Montreal

Review of Current Trade Conditions

Ontario

Continued quiet prevails in the lumber trade throughout Ontario. This condition is general and fairly uniform. The former spotty nature of the trade has become much less noticeable and the situation is now much the same in all parts of the province. In spite of the pessimistic opinions which one has heard expressed so frequently regarding the volume of trade and the difficulty in securing profitable orders, there is a fair volume to report. The long and the short of it seems to be that the well-established firms which have gained their reputation for doing a good business in the past and have paid particular attention to the requirements and interests of their customers are to-day reaping the advantage of their businesslike methods, while others who have been less careful of the interests of their customers are feeling the pinch rather severely. Wholesalers in Toronto, most of whom belong to the former class, report that their men are finding a fair and continuous volume of trade, but that they have to hunt very hard for it, and that when it is secured there is not much profit in it. However, in these days, profit is not the chief consideration, the main thing being to secure orders which will bring back to the wholesaler and the manufacturer sufficient money to make it worth their while to continue in business. Taking this point of view, it is encouraging to note that the volume of trade is sufficient to keep all those who look at things in such a light, going along comfortably. This situation has now existed long enough to justify the trade in feeling that the worst of the period of uncertainty and depression has passed, and that although no one can foretell when or at what rate improvement will come about, there will be, from now on, no reason to expect any widespread trouble. Such readjustments as the trade has required have been pretty well attended to and the question is now one of patient waiting. As we have reported in previous issues, the backbone of the situation to-day is the demand from the former, who is in a position to spend money upon new buildings, alterations and repairs, and who has considerable incentive for so doing in the form of good prices and the demand for his produce. The hardwood trade continues quiet and fairly steady.

Eastern Canada

Reports from the Maritime provinces state that the spruce deal situation is not so encouraging as it was a month ago. The demand for export to Great Britain has decreased and prices are now reported lower than they were at that time. Reasons given for this are not very clear, and it is expected by some shippers that the falling off will be only temporary. One explanation is that some recent shipments which arrived in Great Britain had been made upon more favorable freight rates than usual and that they were sold at a corresponding decrease in price, which the buyers on the other side were quick to accept as a permanent decrease in the price which Canadian shippers were willing to accept. On the other hand freight rates are now higher than ever, being about 140 shillings per standard. Improvement in the shipping situation in connection with stocks from Sweden and Northern Russia is also mentioned as one of the causes. A direct result in the Maritime provinces has been that some of the New Brunswick and Nova Scotia stocks which were destined for Great Britain are now seeking United States markets. In the eastern townships the lumber trade is quiet. Our reports indicate an over supply of lumber, pulpwood and ties in this district. Most of the shipments are going to the United States, and they show a considerable decrease in volume as compared with last year. Reports from the drives in Eastern Canada are all fairly satisfactory.

At Montreal there is no change to note in trade conditions. Retail yards are fairly well stocked and all the buying is of a hand-to-mouth character. Some good orders for spruce for United States shipment have recently been placed at Montreal. Box factories are busy on account of the Government demand for ammunition boxes. The export trade continues unchanged and suffers greatly on account of the lack of space in ocean liners.

St. John mills are all sawing steadily with the exception of the Randolph and Baker mill which is being newly equipped and was expected to be ready for operation by the first of this month. Tonnage continues very scarce and there is some possibility of mills having to shut down later in the season if stocks can not be shipped out more rapidly. There have been no sales of deals at St. John during the past month. Large quantities of spruce boards and low grade stocks are piled around the mills and the demand is light at a reduction of $2 as compared with last year's price. Laths are firm at $3 per M. at the mills, and stocks are light.

The demand for spruce dimension at Boston has not been so active during the past fortnight as it was previously. There is a fairly extensive movement however, and large firms are not disturbed by the temporary lull in the local demand, as they can keep their stocks moving through other channels. It is not expected that any further reductions on spruce frames will occur. The present base quotation of $23 by rail at Boston is about as low as manufacturers care to take the business. There is a general feeling that the market will advance as soon as the small producers have come to the end of their cut. The market for random has been a shade easier. The current trading has been at about the following prices:— 2 x 3, $21; 2 x 4, $21.50 to $22; 2 x 6, 2 x 7, $20.50 to $21; 2 x 8, $22 to $22.50; 2 x 10, $23.50 to $24; 2 x 12, $24 to $24.50. The demand for hemlock is fair at Boston. The shingle trade is quiet at Boston city yards, but the country trade is normal. Extras have been selling at $3.25 to $3.40, clears at $2.75 to $2.90, and second clears at $2.40 to $2.60. In red cedar there is a very wide range.

United States

The lumber trade in the United States, like that in Canada, is now especially interested in the crop situation. During the last month the situation has not looked quite so promising as it did at an earlier period. Extensive rainfall and cool weather in the north have been the chief cause. On the whole however, the wheat crop is expected to be as large as last year's. Generally speaking the crop outlook is excellent, although it is not expected that there will be what may be termed a "bumper crop" in any of the grains. It is quite possible that some recovery may occur, or that further damage may be done which will entirely alter the present conditions.

There is very little change to be noted in the lumber situation. Slight alterations are reported from various localities, but on the whole it is possible to say that a slight improvement is to be noted. General business activity, and a good demand for lumber are reported from manufacturing districts where orders for war material are a feature. This applies particularly to the New England district, where the demand for lumber is increasing and better prices are reported. The same is true also in sections of New York, Pennsylvania and Ohio, while in the west the substantial strength of the agricultural States is making itself felt. Looking into the future therefore the situation is fairly encouraging. The box and box shook trade in many parts of the country is active. Building operations are on practically the same scale as they were a year ago. Manufacturers who use wood are still inactive, and the railroads also are a disappointment so far as their consumption of wood is concerned. The railroads however, are buying to a small extent as they find it absolutely necessary to make many repairs and improvements.

The yellow pine situation is improving steadily but slowly. In connection with the northern pine trade the movement of stocks on the Great Lakes is very nearly normal. At the Tonawandas, receipts are large and there is a fair movement outward. White pine however, is still meeting with severe competition from southern and western goods, and it is reported that many of the mills have recently put out a new price list with important reductions so as to retain the trade for northern pine. On the whole, the northern pine and hemlock situation is fairly good, with a prospect that the product this year will be satisfactorily cared for. There is little change to report in connection with hardwoods. Prices are quiet, but firm.

Great Britain

The "spot" market at London and also that "to arrive" are very steady, with prices still pending upwards. At the present moment, the most important factor is the freight situation. Boats are exceptionally difficult to find and when they have been found the rates asked are so high that importers are doubtful as to the wisdom of fixing charters. Business conditions at London are reported as improving. A considerable volume of new imports has arrived. House building activity is a little greater than it was a short time ago. The new level of prices and the new conditions brought about by the war have permeated the wholesale and retail markets. Extensive fluctuations are no longer expected. There are varying opinions however, in regard to the actual spot market conditions. Some firms claim that the high level of prices will prevent extensive building and that it is impossible for the packing case trade, wagon building, railway orders, transport work, etc., to consume sufficient material to maintain a strong market. Even if this be the case, there is no likelihood of a sudden decline in the demand, or in values. A gradual decline would have no serious effect on British importers, for very few of them have speculated in advance. There is still very little White Sea business

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

in progress. The freight rate situation is compelling buyers to keep out of the market almost entirely. Importers have been expecting that vessel owners would accept 80s. to 85s. per standard, but the rates are still around 105s. to 110s. to London, and importers will not pay this price. The volume of trade in soft woods at London is increasing and prices continue firm. There are still extensive Government orders developing, but they are of moderate proportions as compared with former orders. The bulk of the wood going into consumption is really for more normal trade.

At Liverpool, the trade continues quiet. Transportation difficulties in connection with getting goods to their destination are still serious. Spruce still retains its lead and is likely to do so for some time to come. Arrivals are fair and are keeping stocks about up to their recent normal level. In the Manchester district, trade has recently shown marked improvement, and good business is reported in most descriptions of timber. Hardwood prices are being well maintained. Predictions of advances in the near future are plentiful. The c.i.f. spruce market at Liverpool is reported unchanged, but business in future deliveries is difficult to arrange on account of the freight situation.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Trade Very Quiet—Laths Firm

St. John, N.B., June 20th (Special to the Canada Lumberman): The mills at St. John are steadily sawing, with the exception of Messrs. Randolph & Baker, who expect to have their newly equipped band mill in full operation by July 1st. This will be one of the most modern plants at St. John when finished, and should turn out lumber rapidly, besides being extremely easy upon the log scale, as they have a double cut band saw and a band resaw, both saws being of a very thin gauge. Every success that can be wished should attend them in their new venture after so many years of the old gang saw which was of a very heavy gauge and extremely hard upon the log as it took so much out in kerf.

Only a moderate amount of tonnage is being loaded at St. John, largely by W. M. Mackay. Freights are not any easier and tonnage is as scarce as ever, if not more so. What the outcome will be, we cannot say, but if no further amount of chartering is done it will be very hard to move stocks from the mills here, and if not moved away the mill will be forced to shut down later in the season. It is to be hoped that charters can be made to relieve the situation. No sales of deals have taken place at St. John during the last month, except a purchase by a certain concern of some broad deals to fill a contract made last year at high rates, which, if the stock was not forthcoming, the buyers threatened to cancel. Outside of this sale there is nothing new to report, but a steady slowing up of trade. No marked price can be quoted for deals as no one will risk buying any. Locally no improvement has taken place. Values are not any higher, and the person who wishes to build a house of any kind is able to dictate his terms both as to labor and material, so many are the sellers moving after him. Large quantities of spruce boards and low grade stocks are piled around the mills with but small demand for them, and prices are from one to two dollars per M. lower than a year ago. Refuse lumber of all kinds is a hard seller, and shading is being done. Very little house building is going on. If ever there was a year for a person to build a home, this is the one, and the chance will not come again for some time. All the short lumber trade such as shingles, staves, boxes, etc., are in the same limited demand, and purchases are only being made from hand-to-mouth. Lime is slow compared with other building material. It is to be hoped that before long some ray of light may come which will direct people to move ahead in the building line, and renewed energy will be put into the business of selling. No failures have taken place in the lumber business in this section.

Laths are firm at $3 per M. at the mills, with limited stocks. If everything in the lumber line was as firm as laths there would be no complaint. Collections in the trade do not show any improement. The American market is marking time like our own. No plunging of any kind is being done and will not be until a settlement of the war takes place.

Quiet Trade in the Eastern Townships

Sherbrooke, P.Q., June 24th (Special to the Canada Lumberman): The market in the lumber business throughout the Eastern Townships is moving very slowly. A prominent lumber dealer at Sherbrooke, Que., who has been doing business here for over 30 years states that this is the quietest season he has ever seen. All dealers seem to be loaded with an over supply of lumber, pulpwood and ties. The greater part of the lumber in this district is being shipped to the United States. Shipments show a marked decrease as compared with this time last year. From the district on the Quebec Central in May, 1914, 171 carloads of lumber went through as compared with 100 carloads in May of this year, and 1,475 carloads of pulpwood went through in 1914 as compared with 681 carloads this year. It would appear that the same proportion will be the showing for the month of June. In the week ending June 14, 1915, 17 carloads of lumber have gone through as compared with 38 carloads last year, and 145 carloads of pulpwood as compared with 212 carloads for the same week last year. The large sawmill which B. C. Howard & Company are building on English Lake, in the district now being opened up by the new branch of the Quebec Central Railway, is nearing completion. It is expected that finished lumber will be turned out from this mill during the month of July, and the Quebec Central Railway intend to extend their line as far as English Lake this year.

Montreal Market News—Box Factories Busy

Montreal, June 25th (Special to the Canada Lumberman): Conditions in the lumber market are much the same as stated in the last report. Business is on the quiet side, and as the retail yards are fairly well stocked, there is no incentive to place any large orders with wholesalers. Buying is, in fact, of a hand-to-mouth character. Here and there, wholesalers state that their business is slightly better than it was at this time last year, but much of this is due to orders from outside sources. Trade for United States' account is fairly good; heavy orders for spruce have recently been placed in this city.

Some wholesalers complain of cutting of prices, with a view to securing trade. While every firm is anxious to increase its turnover, there is, it is declared, no justification for cutting down quotations to a level leaving little or no profit, and making a difficult situation still worse.

Box factories are busy, owing to the placing of very substantial orders for ammunition boxes for Government account. The sash and door factories, however, are generally speaking, very quiet.

There is no improvement in the export section. The Government are still requisitioning large amounts of space on the liners, leaving comparatively little for lumber and other shippers. In consequence, the lumber being sent to the other side shows a very marked decrease as against previous seasons. Bennett and Company, who secured considerable space during the winter, are the chief exporters up to the present. Cox, Long and Company have chartered a tramp steamer, managed by Elder, Dempster and Company, which will load at this port and also at lower Quebec ports. Rates rule from 140s. to 160s. per standard.

The ground wood and sulphite markets are dull, several of the mills working below their full capacity.

Privates Campbell and Brown, of the Forestry Products Laboratories, McGill University, have joined the Sanitary Corps organized by Major T. A. Starkey, of McGill University.

Ottawa Trade Quiet But Steady

Ottawa, June 22nd (Special to the Canada Lumberman):—There is little, if anything new to report on trade conditions in the past two weeks in this district. Business is as good as can be expected, taking the general state of affairs into consideration. The demand from the United States brings some business to the mills of local lumbermen. The water in the Ottawa River and its feeders is keeping up fairly well owing to some heavy rains lately.

After conducting a careful investigation into the lumber industry in British Columbia, Mr. Richard Grigg, Commissioner of Commerce for Canada, has returned to Ottawa to make a report to the Department of Trade and Commerce. It is understood that his report will confirm previous reports made on the same subject and will throw further emphasis on the serious results that have come to nearly all lines of trade in British Columbia, especially to lumbering, since the war began last August. Hon. George E. Foster, Minister of Trade and Commerce, has already taken steps to help the lumbermen of the province. Mr. Grigg's report will make additional suggestions for the improvement of present conditions.

Lumbermen in Ottawa are generously co-operating to help the city in obtaining an adequate water supply, that will not only be an improvement on the present supply for drinking purposes, but will

J. & D. A. Harquail

Company, Limited

Manufacturers of Lumber

Extensive New Brunswick and Quebec timber limits, abundant with Virgin Spruce, Pine and Hardwoods.

Twenty years' experience in Milling and Manufacturing, together with a practical knowledge of Building and Architecture, is why our Customers tell us that the Dressing, Grading, and Manufacture of our Stock is just a little better than they expected.

Large stocks of 1 in. Spruce Lumber always on hand.

Try a car of our Air-dried Dressed Spruce.

We also make a Specialty of Kiln Dried Stock.

Our personal attention given to every detail.

Write, wire or phone us for quotations.

Established 1894 ***Incorporated 1908***

Campbellton, New Brunswick

provide a much needed increase in the pressure for fire protection purposes. Shepard and Morse have readily consented to allow the proposed overland pipe to be laid through their yards, at Nepean Bay, without any cost to the city, on condition that any lumber that is moved be repiled again. The overland pipe project was first advocated by Mr. J. R. Booth, the veteran lumberman of Ottawa, about three years ago. At that time he said it would be the best investment the city could make and would do away with the present unsatisfactory under water pipe in Nepean Bay. Nothing was done about it until a few months ago when a commtitee of prominent citizens, most of whom were lumbermen, urged the city to adopt Mr. Booth's suggestion. The chairman of that committee was Senator W. C. Edwards and Sir Henry Egan, Mr. C. Jackson Booth and others were members. Work on the new pipe will commence in a few weeks. The project has been favored by the Canadian Fire Underwriters Association, which has ordered the city to install it and has placed a surtax of 50 per cent. on lumber and other insurance until it is completed. The Provincial Board of Health has approved of it.

An application for approval of plans for a proposed extension to his lumber mills at Chatham Head, N.B., on the south side of the Miramichi River, has been made to the Public Works Department, Ottawa, by John Maloney, lumberman.

Two more lumber cases were heard by the Supreme Court of Canada at the concluding sittings for this term last week. The first case was an application for an order from the Attorney-General of Quebec to allow him to intervene in the case of Leamy vs. the King, which has lately been argued and which concerns the rights over the bed of a part of the Gatineau River. The question of riparian rights enters into the case, hence the request of the Attorney-General, which the Supreme Court granted.

The other case was that of Mersereau vs. Swim, which came from the New Brunswick courts. The action was begun by Mersereau to replevy logs cut on land on which he claimed the title. The defence argued that the Crown owned the land, and that it was included in the limits leased to Swim. Judgment was reserved.

London Stocks and Deliveries of Timber

Churchill & Sim, London, England, in their monthly wood circular, under date of June 3rd state that the stock of timber, deals, etc., at the public docks on June 1st, 1915, was as follows:—

	1915 Pieces	1914 Pieces	1913 Pieces	1912 Pieces
Foreign Deals and Ends	419,000	1,068,000	753,000	793,000
Foreign Battens	800,000	668,000	982,000	855,000
Pine Deals and Battens	259,000	492,000	379,000	365,000
Spruce Deals and Battens	429,000	629,000	451,000	402,000
Boards, Rough	4,834,000	4,772,000	3,659,000	3,284,000
Boards, Prepared	3,469,000	2,898,000	3,358,000	4,424,000
Total	10,273,000	10,527,000	9,582,000	10,123,000

Deliveries for the first five months were as follows:—

	1915 Pieces	1914 Pieces	1913 Pieces	1912 Pieces
Foreign Deals and Ends	1,036,000	1,367,000	1,332,000	1,208,000
Foreign Battens	1,152,000	1,551,000	1,613,000	1,621,000
Pine Deals and Battens	239,000	130,000	176,000	165,000
Spruce Deals and Battens	428,000	284,000	221,000	298,000
Boards, Rough	3,334,000	4,024,000	3,318,000	3,028,000
Boards, Prepared	3,891,000	3,721,000	4,163,000	4,234,000
Total	10,080,000	11,077,000	10,823,000	10,554,000

There has been a decrease in deliveries from the docks of some 2,000 standards during May. The importation has naturally been on a much smaller scale owing to the elimination of the Finnish and Russian Baltic ports as sources of wood supply during the continuance of the war. Prices, helped by a rising freight market, remain very firm, and the best shipments of all classes are realizing high figures when available for delivery. A large business has been arranged for forward delivery from the Swedish side during the month, and some few cargoes of White Sea productions are now being shipped, sales being only possible on a c.i.f. basis, but the extreme rates of tonnage have prevented shippers maintaining their earlier free on board prices, which are now more nearly in consonance with Swedish values. The market is a difficult and anxious one, owing to the difficulty of securing tonnage at any reasonable figures, and the congestion of merchandise of all sorts at some of the ports of discharge is making chartering still more difficult.

From the St. Lawrence the importations were:—

	Pieces 1915	Pieces 1914
Pine Deals	5,000	17,000
Spruce Deals	21,000	2,000
Birch Planks	1,000	Nil

and from New Brunswick—

	Pieces 1915	Pieces 1914
Pine Deals	3,000	3,000
Spruce Deals	1,056,000	102,000
Birch Planks	30,000	200,000

A large quantity of spruce has arrived from the lower ports, and has rapidly gone into consumption. The tone of the general market ahead is steady, but there is a great unwillingness on the part of buyers to add to their stocks while the principal spruce ports are still in a state of congestion. There was no change in London prices. Pine deals have been a very quiet market, and the demand is slower. Freights show no sign of a weaker tendency, rather the reverse.

Liverpool Market Export

Messrs. Farnworth & Jardine, Liverpool, Eng., in their monthly wood circular under date of June 1st, say:—The business of the past month was again of a quiet character, and there is little of interest to report. The arrivals, considering present conditions, compare favorably with the corresponding month of last year, and the deliveries fair. Stocks all round are moderate (of some articles light), and values generally rule on a high level.

Canadian woods.—Pine timber—No arrivals; the demand continues very quiet, but stocks are moderate, and values firm. Waney pine—First Class: No imports have come forward so far this season, but the demand is restricted, and stocks, though moderate, are apparently sufficient for present requirements; values are steady. Second class is only in quiet request; stocks are light; prices firm. Square pine continues slow of sale, and the small stock is difficult to move. Red pine—The demand is exceedingly limited. Oak—There has only been restricted enquiry, and the deliveries have been disappointing, but stocks are light, and values rule firm. Elm—There is little change to report; deliveries have been small; stocks are not too large, and values are firm. Pine deals—The new season's direct import is now arriving in small quantities by the liners; the demand is inactive; still, deliveries from Liverpool have been fair, and stocks further reduced, are now in a very moderate compass; values rule firm. Red pine deals are in request; stocks are light.

New Brunswick and Nova Scotia spruce and pine deals.—The arrivals to the Mersey (including Manchester Canal) during the past month considerably exceeded imports during the corresponding month last year, viz., 5,940 stds. (60 per cent. Liverpool, 40 per cent. Manchester), against 3,600 stds. in May, 1914; the demand continues fairly steady, but the smallness of the figures in the consumption table is partly owing to the difficulty in obtaining delivery and restricted facilities, also several cargoes of recent arrival are still intact; values, although not quite so firm, are on a very high level; stocks are moderate here, and in Manchester very light. Ocean freights established a further advance during the past month, and available tonnage is limited. Pine deals are in steady request; stocks are nominal.

Birch.—Logs—Only some 6,000 feet from St. John, N. B., imported during the month; there has been more enquiry, and the stock is about exhausted, but fresh arrivals are shortly due; values are very firm. Planks—Imports were on a moderate scale, and as deliveries kept pace, stocks are very light; values are firmer.

The following report upon Liverpool and Manchester stocks for the month ending May 31st is furnished by H. W. Lightburne and Company, Liverpool, Eng., and their St. John, N. B., representatives, John E. Moore & Company, Limited:—

Spruce and Birch

Month Ending May 31st, 1915

Liverpool

	Import			Consumption			Stock		
	1913.	1914.	1915.	1913.	1914.	1915.	1913.	1914.	1915.
N.B. & N.S. Spruce & Pine, Stds.	3,910	1,970	3,540	2,680	2,140	1,940	3,960	5,660	5,370
Birch Logs, Loads	540	400	120	340	480	220	780	640	40
Birch Planks, Stds.	436	291	73	164	230	176	715	443	67

Manchester

Spruce, Stds.	1,620	1,630	2,400	2,150	3,000	1,820	4,710	8,510	2,780
Birch Logs, Loads	340	380	0	120	80	60	480	540	0
Birch Planks, Stds.	115	327	0	115	91	91	418	497	103

Stocks in Manchester and Liverpool Combined

Spruce

	1911.	1912.	1913.	1914.	1915.	
Manchester	5,200	6,530	4,710	8,510	2,780	
Liverpool	3,980	2,710	3,960	5,660	5,370	
	9,180	9,240	8,670	14,170	8,150	Stds.

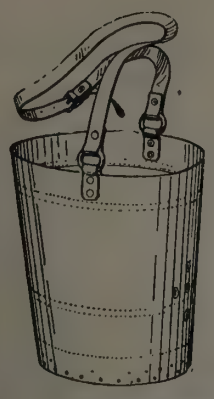
Birch Logs

Manchester	260	300	480	540	0	
Liverpool	960	800	780	640	40	
	1,220	1,100	1,260	1,180	40	Loads.

Birch Planks

Manchester	115	206	418	497	103	
Liverpool	145	485	715	443	67	
	260	691	1,133	940	170	Stds.

For Survey, Railroad and Shanty

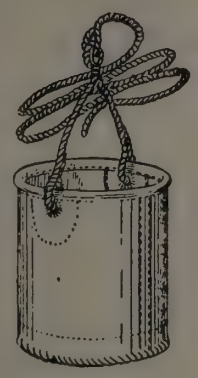


Canvas Feed Bags

No. 1. Double sides and bottom, 12 oz. Doz. $10.00
No. 2. Single sides and bottom, 12 oz. Doz. $9.00
No. 3.. Single sides and bottom, 10 oz. Doz. $8.00

Canvas Water Buckets

Heavy Canvas. Iron ring at bottom, hand sewn, 9 x 12 in. each $2.50.



No. 34B.

Canvas Wash Basins

No. 34-B. Illustrates our Collapsible Folding Wash Basins. When opened is 4½ inches deep and 10 inches in diameter at the top. Absolutely waterproof and all metal parts are rustproof. Weighs 21 ozs. Price, each $2.00.

Collapsible or Folding Pails

No. 45 Open

No. 46 Open

No. 45 Closed

No. 46 Closed

No. 45 and 46. Show our rightly recommended Collapsible or Folding pails. Made of heavy brown canvas thoroughly waterproofed. Metal parts are spring steel rustproofed. They are the only collapsible or folding pails that are rigid when open. They take up less space when folded than any other, are watertight in any climate, and can be used for any purpose where a pail is desired. Write for prices.

Canada's largest Tent, Awning and Flag makers.

Montreal Toronto **Smart-Woods LIMITED** Ottawa Winnipeg

Jenckes Boilers

We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

The Jenckes Machine Co., Limited

Sherbrooke Montreal Cobalt So. Porcupine St. Catharines Toronto Vancouver Nelson

Machinery and Equipment

What Manufacturers of Logging, Sawmill and Woodworking Appliances are Doing

The Practical Evinrude

The accompanying illustration represents one of the many uses to which the Evinrude detachable rowboat motor can be applied. This motor is not only a pleasure machine, but a very practical piece of equipment for use in connection with logging and sawmilling operations. It is used in many parts of the world, from Cape Horne to the Land of the Midnight Sun. It can be found in practically every civilized as well as uncivilized countries of the world. For towing logs and conveying supplies and men by water, this motor is especially useful. The most important feature in connection with it is that it is detachable, and can easily be fitted (clamped with two thumb screws) to any boat or scow. Being attached on the outside to the stern, the motor does not interfere with the storage capacity of the boat. The 3½ h.p. Evinrude will readily handle boats loaded with 8 tons or more. Moreover, its towing power is remarkable. Twenty-two national Governments have adopted the Evinrude motor for war, navy

The Evinrude Detachable Motor—valuable to Lumbermen

and lighthouse service, a convincing evidence of its dependability and efficiency. The built-in magneto is sea and weatherproof and the automatic reverse makes it possible to manoeuvre an Evinrude equipped craft in any way that is desired. All the Evinrude machines have the famous maximum silencer.

For lumbermen, foresters, and contractors this motor is especially useful. It is very powerful for towing and can be hooked right on to a scow or float. Full information, catalogue and prices regarding the Evinrude motor may be obtained from Melchior, Armstrong and Dessau, 116 L. Broad Street, New York.

A New Lubricant for Saw Mills

S. A. Pakes, 77 York Stret, Toronto, whose advertisement appears elsewhere in this issue, has put on the Canadian market a high-grade lubricant, known as "Flota Mica," which has been used with great success throughout the United States. "Flota Mica" is a compounded dry lubricant which will cool any hot bearing when mixed with oil or grease without slowing down the machinery or loosening up the boxes. It is guaranteed to make a saving of from 40 per cent. to 50 per cent. on oil bills, and to reduce fuel, packing, and repair expenses. This is of particular interest to saw mill men, as a large amount of time is wasted in shut down owing to hot bearings. "Flota Mica" is also used with great sucecss by automobile owners, as they find that by using it in the oil and grease that the machine will not require half the power to run, and will not heat up and cause any trouble with regard to hot bearings.

The Knox Tractor

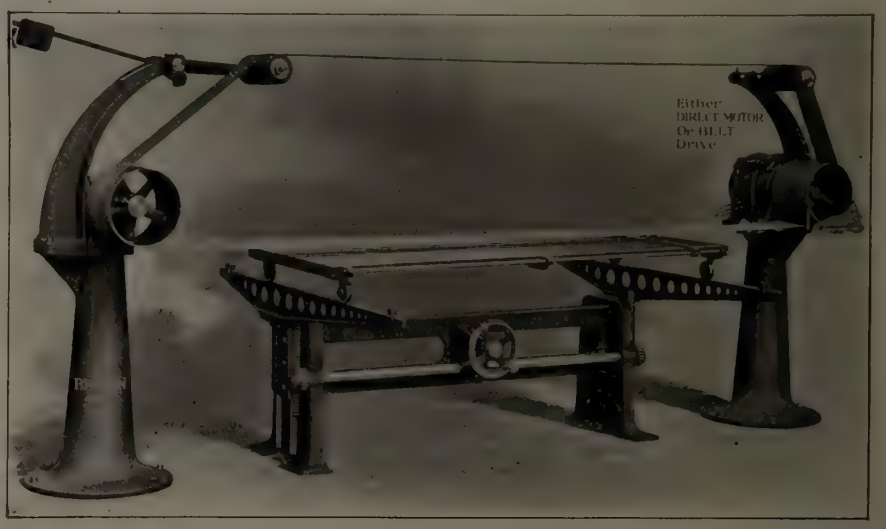
An attractive catalogue illustrating and describing the Knox Tractor, manufactured by the Knox Motors Company, Springfield, Mass., and distributed by the Knox Motors Associates, Springfield, Mass., has recently been published, which is of much interest to all business men who are concerned with the economic transportation of heavy loads over city and country roads. The most important feature in connection with Knox Motors, a feature which is forcibly brought out by the catalogue, is the efficiency and economy of the principle of separating the power vehicle from the carrying vehicle which this company has adopted. The Knox Company was one of the first to adapt the automobile to commercial and municipal use, and has for years maintained a staff of expert transportation engineers to study the question of heavy hauling, devoting special attention to solving the problem of supplying a tremendously powerful, versatile, and economical form of gasoline vehicle for moving heavy loads. The result of these years of study has been that the company has satisfied itself beyond question that gasoline power can be made practical and economical in every field of heavy hauling, by letting the motor vehicle pull its load instead of being obliged to push or carry it. The Knox Tractor can do everything that a motor truck can do, and the company claim that there is a long list of things which a motor truck cannot do, but for the performance of which the Knox Tractor is especially capable; such as hauling structural steel, huge sticks of timber, big loads of sand in bottom dump wagons, and so on. Although its rated capacity with a single trailer is from 5 to 15 tons, the Knox Tractor has hauled as much as 50 tons.

The Zelnicker Bulletin

Zelnicker's Bulletin for June, issued by the Walter A. Zelnicker Supply Company, St. Louis, Mo., contains a list of a number of locomotives, dump cars, flat cars, steel tram cars, rails, etc. which will be interesting to many readers of the Canada Lumberman. The bulletins issued by this company each month are important to all who are interested in the transportation of heavy materials in connection with logging lumber manufacturing, etc. They always include a long list of modern equipment at exceptionally low prices.

A New Berlin Belt Sander

Berlin Machine Works, Limited, Hamilton, Ont., have developed an entirely new furniture and mill work sander designed to receive all sizes of flat, curved or irregular shapes common to furniture and interior trim sanding. This sander is a hand-block belt tool known as the Berlin "Universal" Sander, owing to its ability to finish practically any size or shape of work heretofore only practicable to hand or special purpose machine handling. It is strictly a finishing tool in itself, eliminating the necessity of hand touching up on its own work or that of the big three drum sanders. Mile-a-minute belt travel, coupled with absolute operative simplicity and convenience, lends such capacity to the average shopman as to save the time and wages of four to eight experts sanding by hand.



The Berlin "Universal" Sander

The long "sweep" between the adjustable standards results in an extremely pliable, sensitive belt, allowing getting into grooves or around corners and generally permitting manipulation to shapes of stock that a short belt cannot possibly get at. As the table, as well as the pedestals, are capable of adjustment of unusual latitude, material of great length and of exceptional thickness can also be most successfully handled. Economy is further increased, as neither pulleys nor idlers touch the sand side of the belt so that it clears itself and long retains a fast cutting surface. No counter-shaft is needed and but little power is required to operate this "Universal" tool, which may be belted from any direction, or direct connected motor driven.

CAMP SUPPLIES

WHEN you are in need of Teas, Dried Fruits, Beans and Provisions, in fact anything for the Camp, get in touch with us. We can surely save you money on many lines for the very good reason that we buy in big blocks and are thus enabled to cut deep on the price.

Ask for sample of our Camp blend Teas.

Black 19½ — Mixed 18½ — Green 17½

H. P. ECKARDT & CO.

WHOLESALE GROCERS

Church St. & Esplanade, TORONTO

Lumbermen's Tents and Clothing

Pure wool, Waterproof Mackinaw Coats, Pants and Shirts, the kind you have been looking for.

Repellant Brand Army Duck Tents

The best duck that money can buy. We can equip your van complete.

Pure wool Blankets, Sweaters, Underwear. Hand Knit Mitts and Socks. Palmers Shoe Packs, Buck and horse hide Moccasins, etc.

Grant-Holden-Graham, Limited

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147 to 151 Albert Street, Ottawa, Can.

The EAGLE LUMBER CO. Limited
WHOLESALE LUMBER
SANS-DIEU-RIEN
MONTREAL - Canada
Head Office at Montreal.

10/13 ft. SPRUCE

ROUGH OR DRESSED.

Saw Mills at MONT LAURIER.
Dressing Mills at ST. JEROME.

Herman H. Hettler Lumber Co.
Midland, Ont.

Manufacturers of

WHITE PINE and RED PINE LUMBER and LATH

EXCELLENT PLANING MILL FACILITIES

Special Attention Given to Prompt Delivery.

Everything in Spruce

Dressed and in the Rough

Campbell, MacLaurin Lumber Co.
Limited
Board of Trade Building, MONTREAL

PINE SPECIAL

I offer the following Dry White Pine for prompt shipment.

75,000 ft. 1 x 5, 10/16 ft., Mill Run, Box out.
60,000 ft. 1 x 9, 12/16 ft., Mill Run, Box out.
75,000 ft. 1 x 10, 12/16 ft., Mill Run, Box out.
105,000 ft. 1 x 4 and up, 6/11 ft., Shipping Cull Shorts.
50,000 ft. 1 x 4/6, 12/16 ft., Shipping Cull Strips.
Also a complete line of Mill Cull and Box Shorts, Strips and Sidings in White Pine.

GOOD STOCKS PROMPT SHIPMENTS SATISFACTION

C. A. SPENCER
Wholesale Dealer in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

The Gull River Lumber Company, Limited, Coboconk, Ont., have increased their capital stock from $40,000 to $100,000.

Mr. D. Barker, North Bay, Ont., whose sawmill and yards were recently destroyed by fire advises us that it is not his intention to rebuild at present.

The Rat Portage Lumber Company's mill at Kenora, Ont., was recently closed down for about a week in order to make some necessary repairs to one of its boilers.

A small fire occurerd in the lumber yards of the John B. Smith & Sons, Limited, at the foot of Strachan Avenue, Toronto, recently. causing damage to the extent of $200.

Pinneo & Sons, Niagara Falls, Ont., are erecting a box factory at an estimated cost of $3,500. The building is to be 2½ storeys, 50 x 24, of frame and brick construction with concrete foundation.

The Canada Woodenware Company, Limited, has been incorporated with capital of $40,000, and head office at Toronto. The incorporators include A. Ball, A. F. Haviland, F. W. Chapman and others.

J. E. Baechler, Goderich, Ont., reports that the roof has now been put on his new furniture factory and the men are busy at the floors. They will soon be ready to install the machinery and prepare the plant for operation.

Tenders are being received until July 6th by G. A. Payne for the lumber and coal premises, sawmill, stock in trade, etc., of the late Wm. J. Doxsee, Campbellford, Ont. Particulars may be had from Mr. Payne, solicitor for the executors.

A report from Peterboro, Ont., states that Mr. C. Brisbois has left with a gang of men for Monteith New Ontario, where he will erect a sawmill and pulp mill for a company in which Mr. John Thompson, of Peterboro, is interested.

A contract for supplying 7,000 cords of pulpwood along the Elk Line of the T. & N. O. Railway has been obtained by the firm of McCrea and Sharp, Limited, Sudbury, Ont., and a number of contracts have already been sublet to settlers along the line. The company have 3 rossing machines already at work.

The Rodney Woodenware Company, Limited, Rodney, Ont., manufacturers of berry boxes and baskets report that their recent loss by fire amounted to about $6,000. They carried insurance to the extent of $4,300. The company intend to rebuild their plant and have made temporary arrangements so that they are already operating again.

Hartwell Bros., Limited, have secured a Dominion charter to carry on business as manufacturers and dealers in hardware, woodenware, and lumbermen's supplies with head office at Walkerville, Ont., and capital stock of $40,000. The incorporators include F. G. Hartwell, E. J. V. Ward, M. W. Hartwell. B. A. Copp, Chicago, Ill., and J. A. Copp, Walkerville, Ont.

Serious forest fires occurred along the line of the National Transcontinental Railway recently between Cochrane and Kapuskazing. At the latter place about 500 prisoners of war are detained. For a time the fire threatened the camp. At Jacksonboro a number of cottages were destroyed, but the sawmill belonging to the New Ontario Colonization Company escaped damage.

A Parry Sound despatch states that fire recently caused extensive loss on the limits of the Schrader Lumber Company, Limited, in the southeast corner of Wilson Township. The company lost a considerable amount of timber together with their camp No. 5 and all its outfit of sleighs, harness, etc. The Holt Timber Company also lost one of its camps and the fire passed through about 25,000,000 to 30,000,000 feet of its lumber which will have to be taken out this season. The company is likely to put in a logging railroad for this purpose and may also be in the market for logging machinery.

The Ontario Department of Lands, Forests and Mines is calling for tenders until September 15th for the right to cut pulpwood on an area situated north of the Transcontinental Railway, west of Lac Seul and south of English River in the district of Kenora. Tenderers are to state the amount they will pay as bonus in addition to the Crown dues of 40c. per cord for spruce, and 20c. per cord for other pulpwoods, or such other rates as may from time to time be fixed by the Lt.-Governor-in-Council for the right to operate a pulp mill on or near the area referred to. Tenderers will be required to erect a mill or mills on or near the territory and to manufacture the wood into paper in the province of Ontario. The paper mill is to be erected within such time and in such place as the Lt.-Governor-in-Council shall direct. Tenderers will be required to deposit with their tender marked cheque payable to the Provincial Treasurer for 10 per cent. of the amount of their tender, to be forfeited in the event of their not entering into an agreement to carry out the conditions. Full particulars may be secured from Hon. G. H. Ferguson, Minister of Lands, Forests and Mines, Parliament Buildings, Toronto.

Eastern Canada

Forest Fires near Meductic, N.B., recently destroyed about 300 acres of timberland.

The sawmill belonging to Cleophas Gagon at St. Cecile, P. Q., was recently destroyed by fire.

J. Turgeon, 18 Carrier Street, Levis, P.Q., is contemplating the erection of a sash and door factory to cost $5,000.

Lea Paul Company, Limited, Moncton, N.B., woodworkers and contractors recently suffered a loss by fire. They were covered by insurance.

H. Dupuis & Son, Hull, P.Q., whose plant was recently destroyed by fire have commenced work on the reconstruction of their yards and sheds.

La Fabrique, St. Joseph, sash and door manufacturers, St. Laurent, P.Q., have been registered. The members are Edouard Gohier and Jos. Gohier.

The Brompton Pulp & Paper Company have announced the removal of their sales offices from Boston to the company's headquarters at East Angus, P.Q.

The sawmill belonging to Adelard Dubois at Hebertville, P.Q., County of Lake St. John, was destroyed by fire on June 10th. The loss amounted to $25,000.

W. K. Baldwin, Baldwin's Mills, P.Q., whose sawmill was recently destroyed by fire will commence building a new mill to cost $10,000 at once. He is now in the market for machinery, shafting. belts, etc.

Reports from Bury, P.Q., early in June told of two forest fires in that vicinity, one on the Tambs Brook on land belonging to Mr. A. B. Hunt, and one on the pulp limits of the Bury Pulp & Lumber Company.

A contract has been let to Reid McManus, of Memramcook, N.B., for the construction of a spur line of railway connecting the main line of the Intercolonial with the new pulp mill of the Bathurst Lumber Company, Bathurst, N.B. The contract price is $61,000.

The Edward Partington Pulp & Paper Company, St. John, N. B., are proceeding with the construction of a dam in the Upper St. John Rievr for the purpose of facilitating their log drive. The work will be done by the Ambursen Hydraulic Construction Company.

A fire occurred at Fourche du Pin on the line of the Transcontinental Railway, two miles from Montmagny recently which destroyed a large quantity of pulpwood, owned by H. G. Van Dyke and Messrs. Tanguay and Freres. It is reported that the fire originated in the bushes along the line of the Transcontinental Railway.

Mr. P. H. Renaud has purchased from New York owners the patents on about 4,000 acres of land on the 1st, 2nd, 3rd and 4th ranges of the township of Clinton, at the head of Lake Megantic, P.Q. The land is well timbered having been held in reserve for many years. Mr. Renaud has made arrangements with a United States firm to supply them annually with pulpwood blocks, and is arranging to erect a mill on his limits, probably on Rush Lake. He expects to cut about 3,000,000 feet of logs each year and to ross them before shipment.

Extensive forest fires were reported from Campbellton, N.B., along the line of the International Railway which are said to have resulted in heavy loss to a number of lumbering concerns. The three chief outbreaks were at Anderson, Jardine Brock and Five Fingers. The latter fire destroyed all the lumber at Arseneau's siding and Ross siding. The fire travelled as far as Richards, a distance of nine miles from Ross siding where it destroyed the Boulay mill. The Richards Company at this place managed to save their lumber piles which contained about 4,000,000 feet. A. E. O'Leary, chief game and fire warden for New Brunswick, reported during the third week of June that all the forest fires along the International Railway had been extinguished, thanks largely to the rain. Mr. O'Leary and his men were engaged in fighting the fires for a full week.

Western Canada

The Pacific Timber Holding Company, Limited, has been incorporated with capital stock of $100,000, and head office at Vancouver, B.C.

A despatch from Crescent, B.C., states that the sawmill of the British Canadian Lumber Corporation L,imited, is being overhauled and will be reopened very soon.

A pulp and paper mill is to be constructed at Selkirk, Man. The cost is estimated at $150,000. The construction of the plant is to be pushed ahead as rapidly as possible. J. S. Hughes, Mill Village, N.S., is interested in the undertaking.

The plant of the British Canadian Lumber Corporation, Limited, at Crescent Valley, B.C., was overhauled early in June preparatory to commencing operations for the season. It is expected that the plant will be run for about three and one half or four months this year.

Sealed tenders are being received by the Minister of Lands of British Columbia until July 12th for the purchase of License 1439 to cut 1,760,000 feet of fir and cedar on an area north of Lot 2743, New Westminster District. Two years will be allowed for the removal of the timber.

The Jackman Lumber Mill at Jackman on the Fraser Valley Line of the B. C. E. R., has been taken over by Messrs. Stewart, Davenport, Millar and Slater. The plant is being overhauled and additional machinery is being installed, preparatory to operation as soon as possible.

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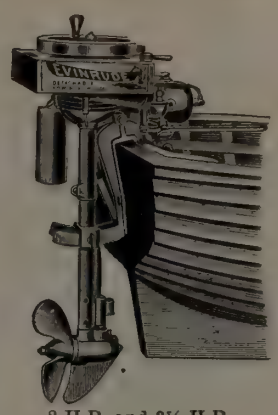

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Continued on page 58)

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa,
December 20th, 1912.

Deputy Minister.

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Simonds Canada Saw Company
Wilson & Son, Walter

SAW MILL MACHINERY

Berlin Machine Works
Hamilton Company, William
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company
Williams Machinery Co., Ltd., A. R.

SHINGLES

Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Rat Portage Lumber Company
Snowball Company, J. B.
Timms, Phillips & Company

SHINGLE & LATH MACHINERY

Dunbar Engine & Foundry Co.
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SOUTHERN PINE

Arkansas Soft Pine Association
Cameron & Company
Garrett Lumber Company, T. H.
Hobart & Company
Mason, Gordon & Company
Wilson Lumber Company
Wuichet, Louis

SPRINKLER SYSTEMS

Keiths Limited

SPRUCE

Auger & Son
Bartram Bros.
Blair & Rolland
Brown Corporation
Cameron & Company
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
Miller Co., Ltd., W. H.
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL CHAIN

McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

SNOW PLOWS

Pink Company, Thos.

TAPS and DIES

Pratt & Whitney Company
Waterous Engine Works Company

TIES

Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

TIMBER BROKERS

Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS

Lauderburn, D. E.
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS

Campbell Lumber Company, L. E.

TUGS

West & Peachey

VENEERS

Hoffman Brothers Company
Webster & Bro., James

VENEER MACHINERY

Coe Manufacturing Company
Perrin, William R.
Philadelphia Textile Machinery Co.

WOODWORKING MACHINERY

American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Hamilton Company, William
Long Manufacturing Company, E.
Mereen-Johnson Machinery Co.
Waterous Engine Works

WOOD PULP

New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

WIRE ROPE

Thorne & Company, Limited, W. H.

RUBBER GOODS FOR LUMBERMEN

Belting Our long experience in the making of Rubber Belts enables us to specialize on this line. "Monarch" "Red Strip" and "Lion" are our leading brands for power transmission. (Write for Booklet B-1.)

Packings "Redstone" High Pressure Sheet Packing has proved by test that it will outlast any other similar packing on the market. We make Spiral and Ring Packings, etc., that are equally reliable. (Booklet P-1.)

Hose for Steam, Water, etc., in various grades, made especially to give satisfactory and economical service under different conditions. (Booklet H-1)

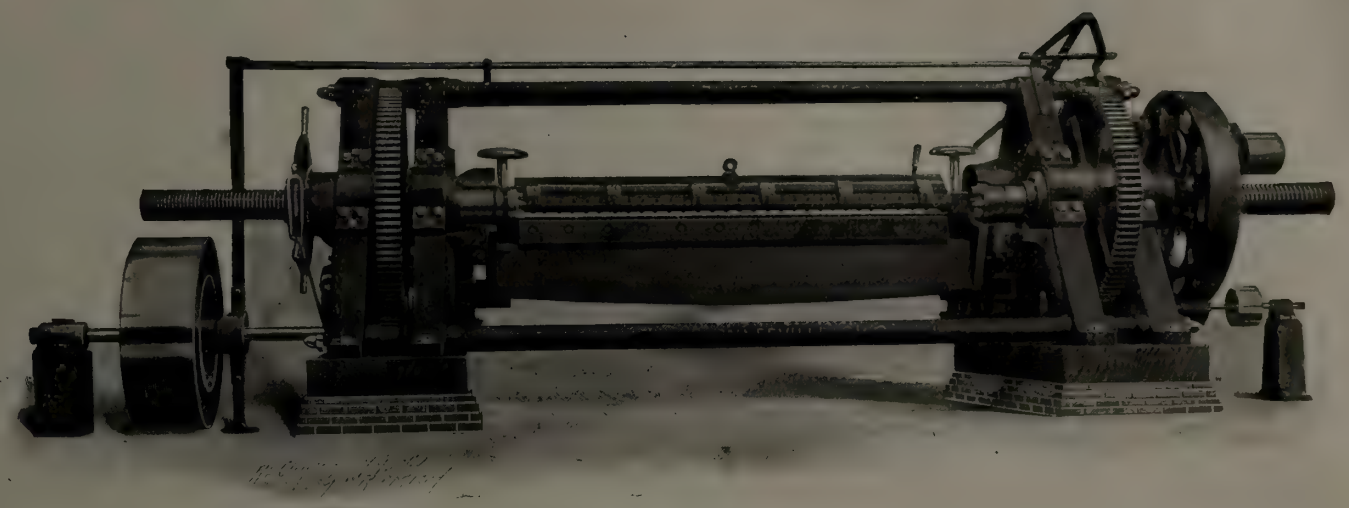
Fire Hose One or more of our twenty brands of Fire Hose will be found, not only in the best equipped Factories, Mills, etc., but in almost every Fire Department in the Dominion. (Booklet H-1)

Gutta Percha & Rubber, Limited

Successors to
The Gutta Percha & Rubber Mfg. Co. of Toronto, Limited

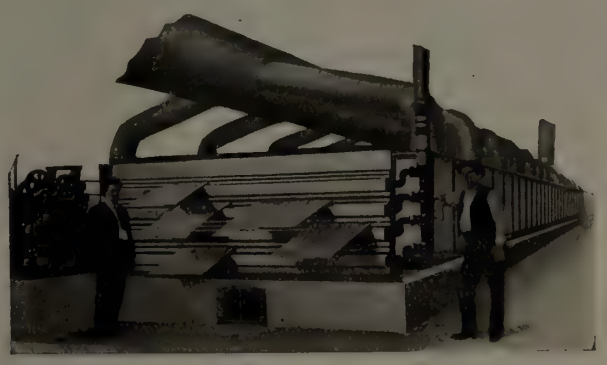
TORONTO MONTREAL WINNIPEG CALGARY VANCOUVER

Veneer Machinery



The Illustration is a front view of the Coe style "A" extra heavy pattern rotary veneer cutter. It is made for any length of knife up to 120 inches; diameter of swing, 68 inches, diameter of spindle, 6 to 8 inches; weight is proportionate to length of knife. This Coe style "A" cutter is used for the heaviest cutting and for making the finest figured veneers. It is the best Rotary Veneer Cutter made in the world.

The Coe Dryer Delivers Bone Dry Stock from Green Veneers.



The Coe Automatic Roller Dryer is built of Steel, Iron and Asbestos.

The Coe Automatic Roller Dryer is designed and built entirely of steel, iron and asbestos which construction gives it unusual durability and ability to withstand the severe service of being operated under the high temperature necessary to dry veneers thoroughly and rapidly.

The Coe dryer will handle any size or thickness of veneers of any species of wood. It will deliver them bone dry, commercially flat and straight without splits, wrinkles or checks or without discoloring, glazing or polishing their surface.

Coe dryers have been designed and built for handling all kinds and thicknesses of stock and for all capacities.

Write us for complete catalogue

The Coe Manufacturing Co.

PAINESVILLE, OHIO, U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer equipment in the world.

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.

E. I. Macintyre, 1413 Great Northern Bldg., CHICAGO.

50% or 90% Which?

MANY mechanics are less than 50% efficient in the use of files. In the mistaken belief that they're "saving money for the firm", they use their files too long. They try to do good work with files that long since passed the "useful point."

They are only 50% efficient.

But if they took good care to discard each file when it reached the "lower efficiency" point, they would be more efficient in using files. They would accomplish more and better work—in less time—and at a lower filing-cost, that would pay you an extra profit over the cost of files.

Make your men more efficient. See that they promptly discard all worn files. And in the interest of **maximum** efficiency, furnish them with the "Famous Five."

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE
(Made In Canada)

World-Standard for 50 years. Produced in 5 great plants—60,000,000 a year. Yet every manufacturing process—from furnace to file—controlled by us. Every file carefully inspected—and put to exacting tests.

Solely on the strength of superior service, they hold 90% of Canada's file trade. This fact speaks for itself.

Over 4000 different patterns—the RIGHT file for EVERY use. Let us send you "File Filosphy" and our Catalog.

Nicholson File Co.

Port Hope, Ontario

The Fortress of Quality

DISSTON TOOLS

Highest Award

Panama-Pacific International Exposition on Saws and Tools

Henry Disston & Sons, Ltd.

2-20 Fraser Ave., Toronto, Can.

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:

1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better ..	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better ...	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing ..	27 00	29 00
1 x 8 common and dressing ..	27 00	29 00
1 x 10 common and dressing..	31 00	32 00
1 x 12 common and dressing..	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common.	25 00	26 00
1 x 12 inch box and common..		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00

Hemlock No. 1:

1 x 4 and 5-in. x 9 to 16 ft. ...	17 00
1 x 6-in. x 9 to 16 ft.	20 00
1 x 8-in. x 9 to 16 ft.	21 00
1 x 10 and 12 in. x 9 to 16 ft.	22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.	19 00
1-in. No. 2, 6-ft. to 16-ft. ...	16 00
2 x 4 to 12, 10 and 16 ft.	19 00
2 x 4 to 12-in., 12 and 14 ft. ...	19 00
2 x 4 to 12-in., 18 ft.	22 00
2 x 4 to 12-in., 20 ft.	24 00
2 x 4 to 12-in., 22 ft.	25 00
2 x 4 to 12-in., 24 ft.	26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.	16 00
Clear in B. C. cedar, kiln dried	50 00

Douglas Fir:

Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.	31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.	32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.	32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.	33 00
10x20, up to 32 ft.	33 50
6x18, 8x18, up to 32 ft.	34 00
6x20, 8x20, up to 32 ft.	35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath..	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4..	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4..	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet...	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4..	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/ .	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4..	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:

1-in. x 7-in. and up $52 00		54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up ..	40 00	42 00

Pine good strips:

1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00

Pine good shorts:

1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No.. 1 dressing sidings ..	30 00	33 00
Pine, No. 1 dressing strips ..	29 00	30 00
Pine, No. 1 dressing shorts ..	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips ..	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips ..	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips ..	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips ..	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft. ...	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in..	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards: 1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12 ...	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run: mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce: 1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16' ..	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M: No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles: xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.
White Pine—In the Raft	
First class Ottawa waney, 18-in. average, according to lineal..	60 65
Oak—Michigan and Ohio	
By the dram, according to average and quality	60 70
Elm	
By the dram, according to average and quality, 40 to 45 feet	70 75
By the dram, according to average and quality, 30 to 35 feet.	50 60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in. $54 00	
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide..	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension S. 1 S. and 1 E.

	6 ft.	8 ft.	10 ft.	14x16 ft.
2 x 4	14 00	17 00	20 50	18 50
2 x 6	14 00	17 00	20 50	18 50
2 x 8	17 00	17 50	21 00	19 00
2 x 10	18 00	18 50	21 50	20 00
2 x 12	18 00	19 00	23 50	21 50

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4-12	20 50
2 x 4-8-14-16	20 50
2 x 4-10-18-20	22 50
2 x 6, 8 to 16	20 00
2 x 8, 8 to 16	20 50
2 x 4-6 and 8-in.; 8, 12, 14 and 16 ft.	22 50
2 x 4-6 and 8-in.; 10 ft.	24 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft...	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

4 inch	19 50
6 inch	23 00
8, 10 and 12 inch	24 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	25 00

Lath

No. 1 Cedar, pine, spruce (not mixed)	5 00
No. 1 Cedar, pine, spruce (mixed) ...	4 50
No. 2 Cedar, pine, spruce (mixed) ...	3 25

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 and 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft. ...	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft. ...	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft. ...	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft. ...	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft. ...	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4 ....$94 00	
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 66)

28 "Service" Branches Throughout Canada

Canadian Consolidated Rubber Co., Limited

Montreal, P. Q.

"TAKING ONE'S OWN MEDICINE"

When you find a physician "taking his own medicine," you can usually rely on his diagnosis.

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28 "Service" Branches Throughout Canada

CURRENT LUMBER PRICES—Continued

No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	40 - 42	26 - 28	14 - 16
5/4 to 8/4	42 - 44	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	48 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8		37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8		29 00
Canadian spruce boards	23 50	25 00
Spruce, 10 in. dimension	25 00	27 00
Spruce 12 in. dimension	26 50	28 00
Spruce, 9 in.	23 50	24 50
Spruce, 8 in. and under dimen.		25 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	21 00	22 50
All other random lengths, 7-in. and under, 10 ft. and up	21 00	21 50
5-inch and up merchantable boards, 8 ft. and up, p 1s	21 00	22 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	22 00	22 50
1½-in. spruce laths		4 15
1½-in. spruce laths		3 80

New Brunswick Cedar Shingles

Extras	3 30	3 40
Clears		2 70
Second clears		2 60
Clear whites		2 30
Extra 1s (Clear whites out)		1 50
Extra 1s (Clear whites in)		1 00
Red Cedar Extras, 16-in. 5 butts to 2-in.		3 50
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear	3 80	3 40

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Cures Inflammation of the Eyes. Price ... ... .50

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Fistula Cure 1.00
Chronic Cough 1.00
Absorbent 1.00

Fleming Brothers

CHEMISTS

79 Adelaide St. East - - TORONTO

"To be, or not to be, that is the question.
Whether 'tis nobler in the mind
To suffer the slings and arrows
Of outrageous fortune,
Or to take arms against a sea of troubles." —Hamlet.

Hamlet the Prince of Denmark is a character which

every budding actor aspires to play. The late Sir Henry Irving certainly inspired many to study the works of Shakespeare and those who were privileged to hear him in Hamlet's famous soliloquy are not likely to forget it. Most of us have been in a state of doubt on many occasions and said to ourselves: The question is:

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Limited

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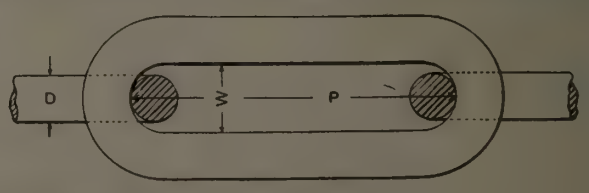

Taking it for granted that you are buying Standard Conveyor Chain we show you here how to obviate mistakes in ordering.
Always give the inside width (W), the inside length (P), and the diameter (D).
We're not infallible, we make mistakes—but if the above instructions are followed it will assure you of getting what you want, with no chance for failure or breakage, caused by using wrong sized chain.

STANDARD CONVEYOR CHAIN

is the best grade conveyor chain made—it's in the same class with our AJAX loading chain—and guaranteed.

Standard Chain Company, Pittsburgh

The Steam Tension Band Mill

It is called the steam tension mill because the tension is maintained by steam—the most sensitive form of tensioning which has been devised.

The result of this is a great saving in saws—**several users of the machine have run through an entire season without cracking a single saw.**

But in addition to raising and lowering the top wheel by steam, there is a separate cylinder for operating the top guide, and these two cylinders make ours an entirely steam-operated mill, and, therefore, exceptionally fast.

It is made with 8 ft., 9 ft. and 10 ft. wheels, and will stand thorough investigation.

Write for bulletin and list of users.

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Peterborough, Ontario

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For the wet places in the mill we have a special waterproof leather belt—"Acme." Other Goodhue Belts are "Extra" and "Standard" recommended according to the conditions under which the belt has to run.

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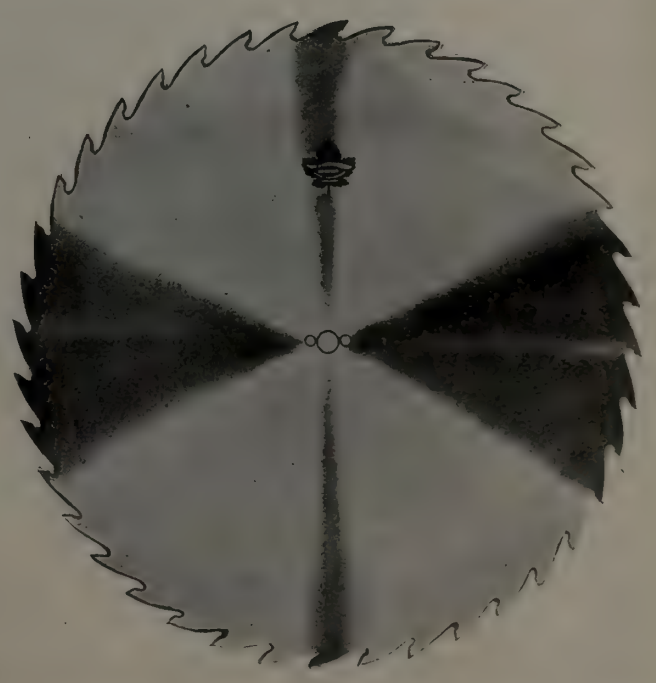

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for Bark Peeling, fills a long felt want.

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We also manufacture a large line of CONTRACTORS' SUPPLIES and MOTOR BOAT FITTINGS.

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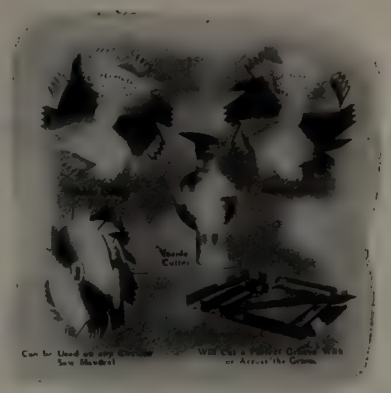

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Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

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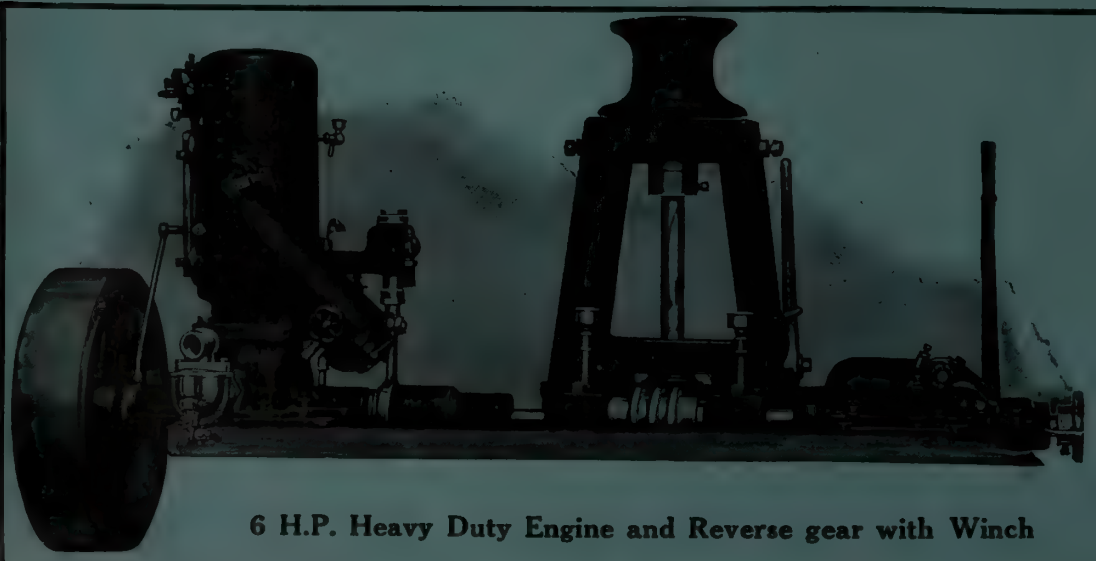
Stocks carried by our Selling Agents:— A. R. Williams Machinery Co. Ltd., Toronto, Ont. A. R. Williams Machinery Co. of Winnipeg, Ltd.

Send Us an Order Now. **If necessary to telegraph do so at our expense.**

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co.
Limited
General Mill Supplies MONTREAL



6 H.P. Heavy Duty Engine and Reverse gear with Winch

River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.

Vol. 35 Toronto, July 15, 1915 No. 14

Canada Lumberman & Wood Worker

New **RAILS** Relaying
12 to 80 pounds per yard.
LOGGING CARS
Jno. J. Gartshore
58 Front St. West, Toronto

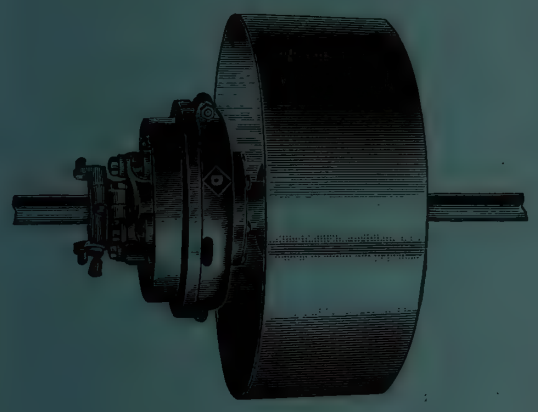
Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.



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For Saw Mills and Planing Mills

A simple, positive, durable clutch! Every Friction Clutch Pulley we sell is guaranteed suitable and satisfactory for the work or money refunded. All sizes split or solid for quick shipment.

Dodge Manufacturing Company, Limited
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GENUINE "TURBROS"
Balata Belting
Waterproof and Stretchless.
The best belt for sawmills.
Manufactured and guaranteed by
Turner Bros. Canada Limited
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Do you realize

That when you buy a Smart-Turner PUMP you contribute to Canada's industrial welfare, since every part of every one of these pumps is MADE-IN-CANADA?

You also Buy the Best.

The Smart-Turner Machine Co., Limited
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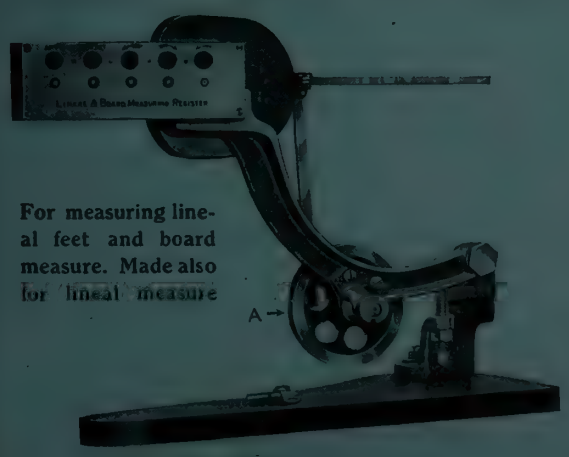

For measuring lineal feet and board measure. Made also for lineal measure

Increase the efficiency in your mill—Reduce your lumber handling costs—and lessen the labor of your men by installing a

Morrison Lumber Measuring Register

This register can be attached to your planer, moulder, resaw, matcher, your sorting table, or any other place you require. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

The Morrison Register can be used in the sawmill, planing mill, furniture factory, woodworking plant or lumber yard. This register is solidly constructed and guaranteed accurate. Used by many of the largest concerns in the country. Sent on trial to any reputable firm.

WRITE US FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertisers, Page 54 Classified Directory to Advertisements, Page 62

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A Good Belt for Wet Runs

Thoroughly Waterproof Oak Tanned

"AMPHIBIA"

Made in Canada

Leather Belting

Despite the many substitutes offered, leather belting is still the most efficient medium of power transmission and likely to remain so indefinitly.

To drive your machines that are producing *"Made in Canada"* articles you should use "AMPHIBIA", *"Made in Canada"* belting.

"AMPHIBIA" belting is made from the best hides selected for their suitability for belting- They are given a special waterproofing tannage in our own tannery under intelligent snpervision.

"AMPHIBIA" belting resists exposure to oil, water or heat generated by pulley friction.

When ordering "AMPHIBIA" belting state where belt is to run.

Write us for prices.

Sadler & Haworth

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MONTREAL	TORONTO	ST. JOHN	WINNIPEG	VANCOUVER
511 William St.	38 Wellington St. E.	149 Prince William St.	Galt Building	107-111 Water St.

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White and Norway Pine

Send us your inquiries for Dimension Timber, Deals, Rough and Dressed Lumber in all sizes and grades.

With a daily capacity of 200,000 feet of Lumber, and 90,000 pieces of Lath we can fill your orders promptly.

George Gordon & Co.

Limited

CACHE BAY, ONTARIO

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Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - Western Office:—Pacific Building, VANCOUVER, B. C.

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock— heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont.

JOHN DONOGH & CO.

Wholesale Dealers

Are looking for buyers

—Special—

1 x 4 & 5 White Pine common and dressing 1913 cut

Dry Hemlock and Spruce all sizes

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Manufacturers of

White and Norway Pine Lumber Lath, Etc.

Inquiries solicited for 1915 cut. Mill and equipment new in 1914.

Head Office and Mill:—**Biscotasing, Ont.**

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For Immediate Shipment

38,000 feet 2 x 4 — 10 — 16
48,000 feet 2 x 6 — 12 — 16
60,000 feet 2 x 8 — 12 — 16
40,000 feet 2 x 10 — 12 — 16
15,000 feet 2 x 12 — 12 — 16
40,000 feet 1 x 6 and 7
30,000 feet 1 x 8
30,000 feet 1 x 9 and wider

PILING

We always have on hand a full line of Spruce and Tamarac Piles, 25 to 50 feet in length.

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Lumber, Lath and Shingles

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GILLIES BROS., Limited

BRAESIDE, ONTARIO

WHITE PINE RED PINE SPRUCE

WE OFFER DRY STOCK FOR PROMPT SHIPMENT.

Spruce—Log Run

(Mill Culls Out)

5/4 x 4/5 x 10/16	1,000	8/4 x 7 x 17/22	500
8/4 x 6 x 10/16	25,000	8/4 x 8 x 17/22	18,000
8/4 x 7 x 10/16	5,000	8/4 x 9 x 17/22	1,500
8/4 x 8 x 10/16	70,000	8/4 x 10 x 17/22	25,000
8/4 x 9 x 10/16	60,000	8/4 x 12 x 17/22	4,500
2 x 10 x 10/16	14,000		
8/4 x 12 x 10/16	55,000	(The 8/4 is sawn the Eastern scant thickness).	
8/4 x 6 x 17/22	5,000		

Spruce—Culls

1 x 4 and up x 6/16	220,000
5/4 x 4 and up x 6/16	500,000
8/4 x 4 and up x 6/22	50,000

Tamarac—Log Run

4/4 x 4 and up x 6/16	60,000
5/4 x 4 and up x 6/16	4,000
3 x 4 and up x 6/16	2,000

Longford Hemlock

The genuine stock, we are now offering to you

Look at the sizes listed below—surely you can make up an order out of same.

1915 CUT—No. 1

55,000—1-in. Sidings
14,000—1 x 4.
48,000—1 x 6.
23,000—1 x 7.
10,000—1 x 10.
16,000—2 x 4— 9.
48,000—2 x 4—10.
42,000—2 x 4—12.
50,000—2 x 4—14.
40,000—2 x 4—16.
21,000—2 x 6—10.
28,000—2 x 6—12.
33,000—2 x 6—14.
27,000—2 x 6—16.

1915 CUT—No. 1

8,000—2 x 8—10.
23,000—2 x 8—12.
40,000—2 x 8—14.
39,000—2 x 8—16.
19,000—2 x 10—10.
44,000—2 x 10—12.
82,000—2 x 10—14.
87,000—2 x 10—16.

1914 CUT

255,000 1 in. No. 2.
308,000 2 in. No. 2.
228,000 2 x 4 No. 2.

Send us your inquiries.

The Long Lumber Company

HAMILTON, ONT.

Something to "Crow" About

HOCKEN'S HEMLOCK

When selling a customer it is comforting to feel that you are offering stock that you can conscientiously "Crow About"—Such stock is Hocken's Hemlock. Get our prices.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

Watson & Todd Limited

WHOLESALERS

Dry White Pine and Norway

OTTAWA

Also

Montreal and Liverpool, Eng.

The

Harris Tie & Timber Co.

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Lumber - Lath - Shingles

Cedar Poles and Posts

Railway Ties - - Piles

The

Georgian Bay Lumber Co.

Limited

Waubaushene, Ontario

Manufacturers of High Grade

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Wholesale Lumber Dealers and Selling Agents for

Fraser & Co.

Mills at

DESCHENES - - - QUEBEC

White Pine

Red Pine

Spruce

Lumber and Lath

River Ouelle Pulp & Lumber Co.

Manufacturers of

SPRUCE

Lumber Lath Pulpwood

Head Office and Mills at:

St. Pacome, Que., Canada

On I. C. Ry. 75 Miles East of Quebec City

Also Mills at:

Crown Lake, Powerville, Riv. Manie

On Nat. Transcontinental Ry.

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OTTAWA, CANADA

Spruce - Red Pine - White Pine

Large stock dry 1" and 2"

Have large stock 3" Spruce Deals for export trade at water points and can make delivery.

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

K L I M

Spell it backward

THE LUMBERMAN'S MILK

Klim is a standard soldier's ration used to-day in every camp from Victoria to Halifax.

Made in Western Ontario. Klim is pure separted milk in powder form. Will not spoil in hot weather. Severest cold cannot affect it. Cheaper than fresh liquid milk. One-third cost of Condensed Milk. No freight to pay on useless water. Using Klim means no waste. It means pure milk for the lumber camp. We can prove our statements.

Packed for camp use especially in 10 lb. tins, $2.00 each. One pound makes one gallon of liquid. Large quantities special prices.

Write for sample and full information.

Canadian Milk Products Ltd., Toronto

Plants:—Belmont, Ont., Brownsville, Ont. Head Office:—Mail Building

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

FIR TIMBERS

HIGH GRADE RED CEDAR SHINGLES

LET US QUOTE YOU PRICES

TIMMS, PHILLIPS & CO., LTD.

Birks Building, VANCOUVER, B. C.

The Glue Book

What it Contains:

Chapter 1—Historical Notes.
Chapter 2—Manufacture of Glue.
Chapter 3—Testing and Grading.
Chapter 4—Methods in the Glue Room.
Chapter 5—Glue Room Equipment.
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Price 50 cents

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347 Adelaide St. West, Toronto

Heavy Fir Dimension

Is Our Particular Specialty

The Heavier it is the Better we like it

We Dress from 1 to 4 Sides up to 16-in. x 20-in., 60-ft.

Our grade is positively right, and prices will please

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Mills at Craigs on the B.C.E.R.
Shipment by C.P.R.R., G.N.R.R. or B.C.E.R.R.

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British Columbia Red Cedar Exclusively

4, 5 and 6 inch "CLEAR A" Cedar Bevel Siding.
8, 10 and 12 inch CLEAR CEDAR FINISH.
EXTRA XXX RED CEDAR SHINGLES.

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Our Mills have now started and we can ship promptly White Cedar Shingles in all grades.

Association Grading Rules produce high grade stock that commands top prices in all Markets, still the price is no higher at our Mills than you are now paying.

Uniform Prices at all Shipping Points with same terms to all buyers.

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Water Shipments from:

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PROMPT SHIPMENT, SATISFACTORY STOCK, GOOD SERVICE.

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For Prices write or wire

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13 Foot **SPRUCE** 16 Foot
Lath and White Cedar Shingles

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SPRUCE, HEMLOCK TIMBERS AND PILING AND LATH

Prices promptly given on all enquiries.
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HARDWOOD LUMBER
Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
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White Pine, Norway, Yellow Pine, Hemlock
Oak Mouldings, Doors, Sashes and Blinds, Cedar Poles and Ties.
Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
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Hardwood Flooring
The Celebrated Diamond Brand
End Matched, Bored, Polished and Bundled
Manufactured by
SIEMON BROS., LTD.
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Good Grades — Right Prices — Prompt Shipments

Canadian Hardwood. National Grading Rules

Birch
Basswood
Maple
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All Thicknesses

Also full line in

White, Red
and
Jack Pine
All grades and sizes.

Get in touch with us for prices

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Manufacturers and Strictly Wholesale Dealers in Lumber

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WE Buy, Sell and deal in all kinds of Lumber and Timber in Canada and United States: Spruce, White Pine, White and Basswood, Ash, Cedar, Douglas Fir, Beech, Birch, Walnut, Cherry, Chestnut, Cottonwood, Hemlock, Maple, Norway Pine, Short and Long Leaf Yellow Pine, Oak, Redwood, Birch, Maple and Oak Floorings, Pulpwood Ties, and Cedar Poles.

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The Canada Wood Specialty Co., Limited
Manufacturers:
Lumber, Hardwood Flooring, Handles, Poles, Bed Frame Stock, Cheese Box Hoops, Heading, Baskets, Etc.
Write, Telegraph or Telephone your orders
Orillia, Ont.

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LIMITED
Toronto
Sarnia
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(La Cie Industrielle de Rimouski, Ltee.)
Dressing of wood in transit on the Intercolonial Railway.

SPECIALTIES
Sawed Hemlock
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White Pine Lath
Bass and Poplar Siding

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Pine and Hardwood
Lumber
Lath and Shingles
North Tonawanda, N.Y.

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Planing of all kinds done by carload. Railroad Switch in connection with mill. All classes of building material, lime and cement for sale.

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FINE BANK, OFFICE, COURT HOUSE & DRUG STORE FITTINGS.
OFFICE, SCHOOL, CHURCH & LODGE FURNITURE.
SEND FOR CATALOGUE

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Spruce, Hemlock, Pine and Hardwoods

Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.

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Do you know the worth of your Timber Lands?

My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,

Whether you want to buy, bond or sell I can be of service to you.

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Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna, Forest Commission, etc.

"Well Bought is Half Sold"

We Offer the Following Special Lines—

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2 Cars	4 x 4 to 6 x 6	Sound Cedar Squares
100,000 Ft.	5/4	1st and 2nd Basswood
2,500 "	8/4	" " "
2,500 "	16/4	" " "
12,000 "	8/4	1st and 2nd Soft Elm
17,000 "	4/4	No. 1 C. & B. Soft Elm
22,000 "	8/4	No. 1 C. & B. Soft Elm
50,000 "	4/4	No. 2 C. & B. Birch
13,000 "	3 x 8 to 16"—10 to 16 ft.	1st and 2nd White Ash
13,000 "	2 x 6 and up—10 to 16 ft.	No. 1 C. & B. White Ash

Hardwoods Thoroughly Dry
Your Inquiries Will Have Prompt Attention

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Mills: Byng Inlet, Ont.

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Hydraulic and Screw
for
VENEER
VENEER DRYERS
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Special machinery made to order

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TORONTO, CANADA Limited

Quick Shipments

Gulf Cypress
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Long Leaf
Timber

From our wharves in Portland, Maine

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Portland, Me.

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We are now cutting a fine stock of

White Pine, Norway and Spruce

Write us if you want some cut for you.

Remember we can Dress, Match and Resaw any stock here.

"WE AIM TO SERVE YOU WITH THE BEST."

ESTABLISHED 1855

THE McGIBBON LUMBER CO.

OF PENETANGUISHENE

Manufacturers of and Dealers in

Lumber, Lath, Shingles, Etc.

HEMLOCK BILLSTUFF a Specialty of which we have the Best Assortment on Georgian Bay.

Don't wait to write. Phone us your requirements.

All stock sized or matched if required.

Our Yards are Unequalled for Drying Lumber

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Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

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Cruising and Engineering Department

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California White Pine
California Sugar Pine
and Arizona Soft Pine

Best Stock for Factory and Pattern Lumber

Ask **LOUIS WUICHET**

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Mills :—
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Long Leaf Timbers, Short Leaf Finish and Railroad Material

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Manufacturers of

Lumber, Lath and Shingles

Mills at Victoria Harbor, Ont.

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Special, 400,000 ft. dry 6/4 Canadian Birch

Hemlock
White Pine
White Oak
Red Oak
White Ash
Birch
Maple
Beech
Rock Elm
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Red Gumwood
Yellow Pine
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Three Sawmills and large, well-equipped Planing Mill, including Sash and Door Factory, with special machinery for the manufacture of Oak, Birch and Maple Flooring.

We supply Timbers, Track Ties, Cedar Posts, Lath, Shingles.

Try us once.

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Everything in Lumber

Write or wire for prices and stock lists.

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Help Protect Ontario's Forests

Ontario receives over $1,500,000 Annual Revenue from its Forests.

Ontario's Production of Lumber, Ties, and Pulpwood creates a Woods Pay-Roll of over $12,000,000.

Further Manufacture of Ontario Wood Products creates a Pay-Roll of over $20,000,000.

The Total Pay-Roll means $13 yearly for every Man, Woman and Child in the Province.

Fire means **your loss**

Protection means **your gain**

Take No Chances With Fire

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Minister of Lands, Forests and Mines.

Edward Partington Pulp & Paper Co.
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Head Office: ST. JOHN, N.B.

Mills: St. John, N.B. Blackville, N.B. Nanudogan, N.B. Marysville, N.B.

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Bleached Sulphite Pulp

Spruce, Pine and Hemlock Lumber, Laths, Hardwoods

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Wholesale

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Mills: Charlemagne, Montcalm, St. Adele

The Gres Falls Company
Mills: Three Rivers and Cape Madelaine

St. Gabriel Lumber Co., Limited
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Manufacturers of

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Large and Long Timbers
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For Interior Finish

Redwood is easy to work and takes a beautiful finish.

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Redwood leads for it does not rot. It needs no paint.

Ask for our Catalogue. Ask for our Finish Book.

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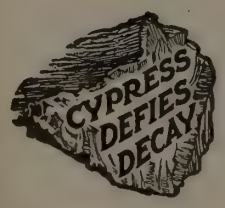
Our Mills Produce and We Market as Much

GENUINE LOUISIANA RED CYPRESS

As All Other Concerns Combined



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Machinery and Timber For Sale

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the Town of Parry Sound, Ont.; and other Lumber Equipment, including boom chains, plows, sleighs, etc.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

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1 Lath Mill with bolter.

2 Lath Trimming Saws.

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1 Automatic Machine for circular saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

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2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

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1 Wood Machine for 16-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

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All of the above open for inspection at Parry Sound.

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Limited

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8/4 1s and 2s, 1 car.
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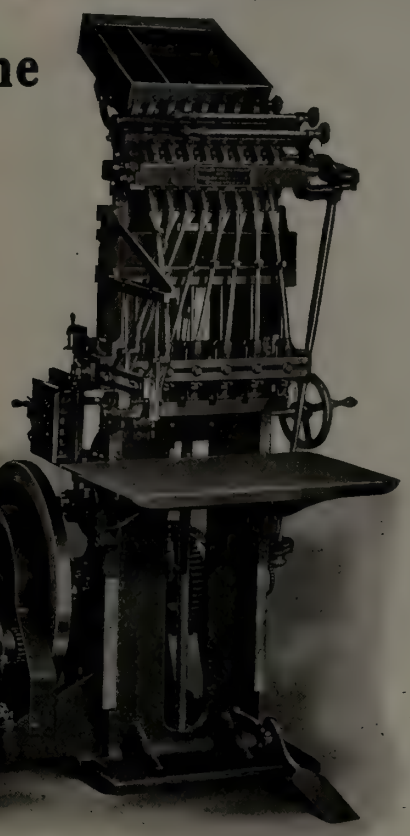

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Manufacturers and Exporters of all kinds of

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A Specialty

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Laths and Ties **CAMPBELLTON, N.B.** Pulpwood

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It is called the steam tension mill because the tension is maintained by steam—the most sensitive form of tensioning which has been devised.

The result of this is a great saving in saws—**several users of the machine have run through an entire season without cracking a single saw.**

But in addition to raising and lowering the top wheel by steam, there is a separate cylinder for operating the top guide, and these two cylinders make ours an entirely steam-operated mill, and, therefore, exceptionally fast.

It is made with 8 ft., 9 ft. and 10 ft. wheels, and will stand thorough investigation.

Write for bulletin and list of users.

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Peterborough, Ontario

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Please send me your trim book and name of the nearest dealer who carries Arkansas Soft Pine. Please send me, if you have it, a price list of inside finish in less than carload lots, that is, if you have no dealer in this state.

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We are reaching the public that **wants to buy through the dealer.**

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We receive requests for the "name of the nearest dealer." Shall we send your name, your competitor's name or refer the inquirer to a dealer in an adjoining town?

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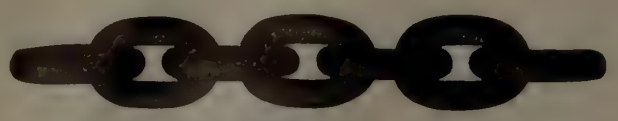

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Largest Manufacturers of Band Sawing Machinery in the World.

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MONTREAL ST. JOHN WINNIPEG

CALGARY VANCOUVER

Canada Lumberman & Wood Worker

Issued on the 1st and 15th of every month by

HUGH C. MACLEAN, LIMITED, Publishers

HUGH C. MacLEAN, Winnipeg, President.
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TERMS OF SUBSCRIPTION

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Single copies 15 cents.

"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

Authorized by the Postmaster General for Canada, for transmission as second class matter.

Entered as second class matter July 18th, 1914, at the Postoffice at Buffalo, N.Y., under the Act of Congress of March 3, 1879.

Vol. 35 Toronto, July 15, 1915 No. 14

Canadian Export Methods

Have the lumber manufacturers and exporters of Canada actually fallen down in connection with placing their goods before the consumers of Great Britain and in other important countries? We do not feel competent to answer this question off hand, yet we cannot avoid a certain feeling that there is some reason for a criticism along these lines, as pointed out in a letter from Chas. T. White & Son, Limited, of Sussex, N.B., which we published in our Export Number of June 1st. We want to put this question before the readers of the Canada Lumberman and learn what they have to say about it. We are not doing this to work up any controversy, but with the object of putting the situation squarely in front of them in the light in which it is seen by lumbermen of considerable experience. Then it will be up to the other lumbermen to demonstrate whether the case, as put by Chas. T. White & Son, is correct, and if so, to suggest how to put things right. Frankly, we may say that our opinion is that the situation calls for pretty drastic treatment.

"It is a notorious fact" says the letter from Chas. T. White & Son, "that the British importers—be the cause whatever it may—continue to place an embargo on special quality in either hardwood or spruce shipped from Canada, for the manufacturer of furniture, pianos, aeroplanes, and all such trades, demanding very high quality and a standard dependable grade." Continuing the letter accounts for this, firstly, by "established custom," a serious enough barrier indeed, but one which can be surmounted; and secondly by "the failure of Canadian manufacturers to take the buyers by storm according to the American custom."

Here is the situation set forth in black and white, in clear cut fashion. Have we been content to allow established custom to keep us from taking the buyer by storm, while our competitors have been doing the practical thing which we should have been doing, and have thereby built up their own trade, establishing another custom to our detriment. "Materials in selected grades of birch and spruce have been continuously imported into Great Britain from the United States and the American associations have standardized the grading and monopolized the trade, keeping the importers persuaded that Canada lacks the quality and is not capable of proper grading." Further than this "the naturally high quality of the forest production of Canada, and the ability of manufacturers to select the product are kept in the background because of the failure of Canadian manufacturers, due to their very limited numbers," to push their product in Great Britain. These are the chief points brought out in the letter referred to above which also adds the assertion that considerable stock is being shipped into the United States ports of Portland, Boston, and New York, and from there re-shipped to Great Britain at a great additional expense in freight, **simply because it is known that, if such stock were shipped from any port of Canada buyers would be prejudiced against it.**"

"As representing Canadian manufacturers," Messrs. Chas. T. White & Son say, "we wish to appeal to British importers for a chance to supply the materials above referred to and hope that these few words may cause serious thought, and that results may follow in the way of establishing trade hitherto denied to Canadians."

These points we would like our readers, both in Canada and Great Britain, to consider fully. There is no matter of patriotism tied up with this. As we see it, it is a simple business situation. If we have, on account of a number of influences failed to develop a trade which according to the natural laws of business ought to have been easy to develop, there must be something wrong with the way we have been looking after our affairs. Without wishing to attach the blame to the Canadian exporter or the British importer, we would like to have both of them tell us where the trouble really lies and how it can be removed. The present is a time above all others when opportunities for developing trade which is of mutual advantage to Great Britain and Canada should be worked up to the fullest possible extent. If this matter is, at it would seem, one which depends largely upon practical grading and forcible publicity, the sooner we all realize and admit it the better it will be, both for Canadians and for British importers. It is not beyond the realms of possibility that Canadian manufacturers and exporters should get together and, within a reasonably short space of time work out and put into effect grading rules which will put them upon all fours with their competitors in the United States. It is a galling situation that we should ship any of our excellent stock to the United States in order to have them sell it in Great Britain. Surely our stocks are fine enough to sell upon their own merits and our merchants are bright enough to see that this is brought about.

Are You Making Money—How Do You Know?

Bring together any group of lumbermen nowadays and if the conditions favor a friendly talk it will not be long before they have drifted into a discussion of trade matters, having reference chiefly to some such feature as the regulation of credits, the prevention of price cutting, or the proper way in which to deal with firms that seek trade beyond the fair limits of their particular line of customers, such for instance as the wholesaler who goes beyond the retailer and sells to the latter's trade. All of these subjects have been discussed in our columns from time to time, emphasis being placed upon the chief points of importance and interest. A few days ago a group of lumbermen, who met one another in the course of their business wanderings, fell into a discussion of present-day trade conditions, and it was not many minutes before one of them asked the others how many lumbermen today were doing business at a profit. At once the avowal came from each that business today was being carried on at a loss. "What then are we going to do?" asked the first speaker. "Shall we close up shop, or hang on?" All were for hanging on, readily admitting that the present conditions of trade—uncertain enough though they were—did not justify any such action as deserting the ship. "How do you know you are losing money," asked one of the inquisitive members of the group; and then the discussion was clearly launched upon the question of costs and how to estimate them.

Among those who composed the little group were several lum-

bermen who had conducted exceptionally successful retail, wholesale and manufacturing businesses for many years, and who, whether they did so systematically or not, must have been managing their businesses in such a way as to keep the receipts well in advance of the costs. But when they came to something in the form of a showdown during the discussion, there was a peculiar state of affairs to report. Among the little group—less than half a dozen in all—there were firms represented whose cost affairs were handled in several different ways. The systematic cost system was represented by a man who was ready to turn up his books and show you to your own satisfaction just what the firm's financial situation was at that moment. There was another who has done business successfully for many a year, but who admitted readily that he was not prepared to make any such a showing. There were those who wanted to know how much the other fellow estimated as the cost per board foot of each piece of stock he sold, and how he arrived at his figures; and so on. Now all these men and firms are acknowledged to be good from a business point of view, and in the mind of the uninitiated trade journalist the question at once arose, how about all this talk of cost accounting. Is there any truth in the statement that the man or the firm is going surely to the wall who does not know to within a cent what is the cost of each item he delivers, including material, overhead, manufacturing expenses, rent, insurance, interest and a lot of other mysterious elements? Or is there something else in connection with the management of a business which has perhaps as great an influence upon the final result as the systematic and analytical keeping of accounts?

We do not suppose that this question will ever be thrashed out to the satisfaction of everybody. There will always be firms going ahead successfully whose members are disciples of each school. The question apparently resolves itself into a consideration of the best thing to do under each particular set of circumstances. We can conceive, and we think we know, of firms in which the personal element of management is of far greater importance than the scientific element of minute analytical and scientific cost accounting, yet it will take a lot of argument to persuade us that a combination of these elements would not bring an even better result and that in every case there is not need for as much of analytical cost accounting as can be made use of without increasing unnecessarily the burden of doing business. We hope, in these columns, before long, to be able to publish a number of interesting articles dealing with the figuring of costs upon several important branches of the retail lumber business, and we believe that they will show to many of our readers how little they know of the actual elements combining to make up the costs of their delivered goods. We hope in this way to demonstrate that the present idea—common among far too many members of the trade—of taking any old order so long as it will bring about the removal of some stock from the yard, is all wrong and ought to be discontinued. We have a hazy idea, moreover, that some of our more shrewd readers will see beneath the analysis of present-day cost conditions and prove that they are . . . . . well, we won't put it that way, but will say that they will see that the only thing to do now, to enable them to keep on an even keel until trade again becomes normal, is to take out their price lists, select the chief lines which people call for, get as good an idea as they can of the cost of each, add a few dollars to this, and say to themselves seriously, "from now on that is our price, and if the other fellow wants to cut his price lower he can do so, and welcome to the business he gets, for I am tired of losing money." That is where the cost analysis idea gets in its fine work. It enables a man in such times as these to hold firm if he has a little money in the bank to pay his butcher and his grocer, while the other fellow is making presents to the consumer of lumber. For, ever since the earliest days when our forefathers swapped spear heads for pieces of bear steak, no one has grown wealthy by a continued process of bartering something for less than it cost him. If a man does not know what the cost is, his natural inclination to make a trade will result in his ruin unless it is checked.

We do not expect anything in the way of a millenium to come about after the readers of the Canada Lumberman have taken our advice, but just by way of a little entertainment for the hot weather, we would like some of them, while they are figuring upon a chance of getting an order on which a dozen others are also figuring, to forget the order and imagine how nice it would be if all the yards in one town, for instance. were to mend their ways, set out upon their individual price lists the lowest price they will take for the chief articles in request—prices which must involve a profit—and then sit back and live on their capital for a time. How long would it be, even in these days, before most of them would be adding a little to their bank accounts instead of living upon them? We think it would only be a short time and that long before the trade returned to a normal basis they would have ceased worrying altogether about a lot of orders which can only be secured at a loss.

Removing Retailers' Troubles

A short time ago we published in the Canada Lumberman a number of letters from Ontario retailers who complained of the practice among some wholesalers of seeking out the retailers' customers and selling to them direct. There is nothing under the sun to prevent any man from selling whatever he has for sale to any other man who wants it and has the money to pay for it, except the dictates of common sense and business honor. But unfortunately these two factors do not come into play in every case and there always have been and always will be men who take the point of view that business is—first, last and always, a matter of the survival of the fittest; and that their own particular view of what constitutes the "fittest" is the proper one. It is only the chastening influence of bitter experience that can finally bring such men to their senses and show them that business, like everything else in this human world, is based upon the community of interest idea, and that the immediate interests of the individual may not always be coincident with the permanent interests of the community; in the welfare of which the individual himself is unquestionably and completely wrapped up. It is an old saying that there are many men who cannot see good profits a little distance off because they are blinded by the dollar which they are holding too close to their eyes. This is the case with the wholesaler who thinks that he can build up prosperity by going with his goods direct to the consumer instead of selling them to a capable retailer.

The articles which we published upon this subject brought forth several letters which also appeared in these columns and among the letters received was one which shows that the trouble is of very considerable proportions, and that it can be removed to a great extent by the retailers themselves. The Southwestern Ontario Retail Lumber Dealers formed an association not very long ago and have met this difficulty successfully after having discussed it extensively at their meetings. In a letter which the secretary of the association wrote to the Canada Lumberman recently he says that at the meeting held on June 15th this question formed the sole topic of discussion, and the members passed a resolution to the effect that the clause in their constitution dealing with the matter should be rigidly enforced. This clause puts the matter so clearly and sets forth the reasonable point of view for a retailer to take, so definitely, that we think the retail lumbermen throughout Canada should have the benefit of reading it and seeing what their progressive fellow retailers in Southwestern Ontario have accomplished. The clause reads, in part, as follows:—

> Any member of this association reporting shipments to a consumer by a person, firm or corporation claiming to be a wholesale dealer shall notify the Secretary of this Association in writing, giving as full information in reference thereto as practicable, such as date or dates of shipment and arrival, car number and initials, original point of shipment, names of consignor and consignee, the purpose for which the material was or is to be used, and such other particulars as may be obtainable.
>
> Upon receipt of such notice, the Secretary shall first ascertain whether or not the complaining member carries a stock reasonably commensurate with the demands of his community, and if he finds that such stock is not carried, he shall ignore the complaint, unless, upon application of such complaining member, the Executive Committee shall reverse his finding, but if he finds that

such stock is carried he shall then make a thorough investigation of the matter, including an explanation from such wholesaler, and report the same to the Executive Committee, who shall then determine whether or not the act of such wholesaler or manufacturer was deliberately unfair, and if they determine that it was, then the Secretary shall notify the members of this association of such sale, but this section shall not apply in cases where the business methods or financial conditions of such retailer will not justify a manufacturer or wholesaler in dealing with him.

Under no circumstances shall the Secretary enter into any agreement with a manufacturer or wholesaler that any one of the Association members will deal with him, nor shall he in any case exact a promise from the wholesaler or manufacturer that he will not sell to consumers, nor shall any result other than that of the members refusing to buy from such manufacturer or wholesaler, follow from the steps taken as hereby provided for, but, upon receipt of this notice, each individual member of this Association shall be free to exercise his judgment and choice as to his course of dealing with the wholesalers or manufacturers mentioned in such report.

The foregoing provisions shall apply in reported cases of lumber commission merchants, agents or brokers, who sell to consumers but do not carry stocks, and as against the manufacturers who sell to such commission merchants, agents or brokers.

Each member, when he joins this Association, and once each year thereafter and oftener if the Secretary shall request it, shall furnish the Secretary a list of those manufacturers and wholesalers, and their agents, from whom he makes purchases of lumber and other building material.

Here is an arrangement among a number of retailers for their mutual protection, which is based upon reasonable, businesslike grounds, and which we understand is working out most successfully, proving conclusively that the remedy lies in the hands of the retailers themselves. We hope that others will see the logic of the situation and that similar associations will be organized in many parts of Canada for the purpose of removing this evil. Retailers themselves will not be the only ones to benefit by such a step. The legitimate wholesalers and manufacturers who give the retailers a fair deal will be equally, and in many cases more extensively benefited than the retailers themselves.

Editorial Short Lengths for Busy Readers

A striking indication of the enormous increase which has recently taken place in the cost of making cargo shipments by vessels is afforded by the case of the ship Avon which has recently been chartered to load lumber at Boston, Mass., for Buenos Ayres at the highest rate which has been paid during the last decade. A year ago the owners were glad to accept $8 to $9 per thousand feet for this journey. The Avon has now loaded with 1,500,000 feet of white pine and other lumber and is due to sail about July 15th, the rate being about $22 per thousand feet.

The Forest Branch of the Department of Lands, Victoria, B.C., are working out a scheme for the preparation of a series of pamphlets to be distributed among consumers of lumber in the Prairie Provinces. This scheme is part of an important campaign being carried on by the Department for the improvement of farm buildings and for increasing the consumption of wood where it may be properly used. The pamphlets will be illustrated by cuts of the buildings, will give approximate costs, will tell where and why wood should be used rather than substitutes, and where detailed plans and material may be secured. They will also impress upon the farmers the importance and advantages of mixed farming, not only because it is a more profitable proposition for the farmer, but also because it leads to a greater consumption of wood. These pamphlets will be distributed through agricultural associations, lumber yards, etc., and will be advertised in farm and lumber papers. Among the interesting contents of the pamphlets will be the following descriptions:—working plans and building instructions for the best and cheapest kinds of farm buildings for the Prairie Provinces, including residences, general purpose barns, horse barns, dairy barns, beef cattle barns, sheep barns, silos, piggeries chicken houses, implement sheds, etc. The advantages and disadvantages of barns instead of enclosures or wind brakes for stock will be discussed. Similarly advantages and disadvantages of wood in comparison with concrete stone, brick, metal, etc., will be taken up. Considerable attention will also be given to the merchandising of lumber to the consumer, and to the general advantages of wood as compared with wood substitutes. The National Lumber Manufacturers' Association of the United States which is developing a trade extension department will co-operate with the Canadian officers in this work and furnish them with information regarding the best uses of wood.

A Workmen's Compensation Act has been introduced in the Legislature of the province of British Columbia. The proposed act is of a compulsory nature embracing all occupations under the administration of the Government. Two schedules of occupation are provided, schedule one embracing all occupations arranged in classes according to their hazard, with the exception of railways, telephone lines, steam vessels when owned and operated by railroads, or express companies similarly owned or operated, which are included in schedule 2. In connection with schedule two, the employers are liable for compensation both in the construction and operating departments. The manner of carrying insurance, method of payment, etc., under schedule two are to be supervised by the Workmen's Compensation Board, consisting of one commissioner holding office for ten years, whose findings are not subject to revision by any court. The administration of the act is virtually within the power of the Board. An assessment on the various classes is to be made prior to the application of the Act to such extent as the Board deems sufficient. Compensation is paid from the sum total of the accident fund, if the amount in a certain class falls short. Each year the Board makes an assessment based on the experience of the preceding year. The accounts of the Board are to be audited by the auditor-general reporting to the Lieutenant-Governor.

In case of death from injury or industrial disease the board pays (1) burial expenses up to 75; (2) to widow, monthly payment of $20; (3) for each child under 16 years $5, the total amount not to exceed $40. Should the widow marry she is entitled to a lump sum equal to two years' payments to be paid within a month after her marriage.

In case of permanent total disability, payment of 55 per cent. of the weekly earnings of the employee is made during life.

In case of permanent partial disability the difference in earning capacity governs the amount of award.

In temporary total or partial disability the awards are made during the time of disability. A waiting period of 14 days is provided in all injuries, should the employee be incapacitated a longer time than 14 days, compensation is paid from the time of the disability.

"Presumptions" of interest are found in Part I, Section 3 (2) which says: "Where the accident arose out of the employment, unless the contrary is shown, it shall be presumed that it occurred in the course of the employment, and where the accident occurred in the course of the employment, unless the contrary is shown, it shall be presumed that it arose out of the employment.

The inherent risk of the industry and the negligence of a fellow servant are not a bar to securing compensation by a workman operating under Schedule 2, but contributory negligence shall be taken into account in assessing damages in an action taken by the workman under the "Families Compensation Act."

A convincing proof of the indestructibility of cedar is reported from Boston. Years ago, when the city's modern rapid transit system was in the making, the contractors built a new roadway, paved with granite blocks, without bothering to lift the ties and rails on the old horse car track. While some excavating was being done recently the old car track was uncovered, when it was found that the cedar ties were yet tough enough for service, while of all the iron there remained only some badly corroded spikes which owed their preservation to being deeply embedded in the sound wood.

A new line of cargo steamers has been organized to ply between the Orient and Pacific Coast ports, it will be known as the Timber Line, and very properly the vessels will fly a houseflag showing three Douglas fir trees on a white background.

England's War Time Requirements

First Report by H. R. MacMillan, Special Commissioner sent by Dominion Government—Important Details of the Trade

Mr. H. R. MacMillan, the special trade commissioner who has been sent by the Dominion Government to Great Britain, South Africa, Australia, China, Japan and many European countries to enquire into the possibility of enlarging the export trade in Canadian lumber, has submitted his first report. Mr. MacMillan went from Canada to the United Kingdom and has made extensive investigations into the special requirements for timber in the United Kingdom which have been the result of the abnormal demand created by the war. The information published in his report is definite and extensive, and we recommend our readers to study most carefully this, and the subsequent reports which we will publish.

Mr. MacMillan's first report, which is published in the Weekly Bulletin of the Department of Trade and Commerce for June 21st, is as follows:—

The war has, by shutting off accustomed important sources of supply and creating new demands, materially affected the timber trade in the United Kingdom. The most important direct demands for timber, attributable to the war, have been for huts and housing for troops, booms and defence works, shipbuilding, aeroplanes, and strategic railways.

Huts and Housing for Troops

The necessity for rapidly housing the army in training in England and France was met by building huts. Timber to be acceptable for this work had to be cheap and delivered immediately, or at least within a few days of being ordered. The buildings resembled in construction the shacks and granaries built on the prairie, being nearly all of one type, about ten feet wide, twenty feet long, seven to eight feet high at the eaves, and three feet higher at the ridge. The only materials used in the construction were scantling, light lumber, and prepared roofing. Owing to the great demands made upon the market both the scantling for joists and studding, and the lumber for flooring, siding, and roof sheeting were used in all the sizes common to the United Kingdom trade, both rough and surfaced, matched and square-edged. The important dimensions for scantling and dimension have varied in half inch sizes from 1½ to 4 inches in thickness, and in half inch sizes from 3 to 5½ inches in width; the most important sizes have been in the neighborhood of 1½ x 4½, 2 x 4, 2 x 4½, 2 x 5½, and 2 x 6. The flooring has been all one-inch thick, varying in inch sizes in width from 5 to 12 inches, both square-edged and matched. Siding has absorbed many varieties of ¾ and 1-inch stock, rough, surfaced, matched, and beaded; the greater quantity of the siding and sheeting has, however, been one-inch stock, varying in width by half-inch sizes from 4 to 7 inches, and by inch sizes from 7 to 9 inches. Lengths were 9 to 25 feet, including all odd and even lengths. The prevailing grade has been merchantable, full of sound hard knots, admitting stain, sap, and waney edges.

The amount required up to date has been in excess of 150,000,000 feet board measure. The accumulation of this large stock was made possible by the fact that ordinarily 2,000,000,000 feet of this material is imported into the United Kingdom annually from Russia, Sweden, Canada, and Norway in the order named, and that even on April 30, 1915, there were 10,200,000 pieces of deals, battens, and boards in the London public dock stocks. The Government bought up the available yard stock, which after the outbreak of the war was replenished from Archangel, Sweden, Norway and Canada. The Government also made purchases f.o.b. in Sweden. The f.o.b. price in European ports did not increase greatly, but the freight rates so increased that the class of material used increased in price from $26 c.i.f. per M. feet b.m. at the outbreak of war to $35 c.i.f. per M. feet b.m. at the present time. These high prices ruling through the winter led to the cutting of several million feet of timber from the forests and plantations of Great Britain.

Some pitch pine, chiefly in one-inch stock 4-6 inches wide, was used on account of its better appearance, and finishing qualities in the trimming of the officers' huts. This material sold in England for $38 to $40 per thousand.

No ready-made huts were used. It is doubtful if they could be shipped to the United Kingdom from any point as cheaply as the rough timber can be shipped, and the houses built after shipment. The building of the houses here is rendered advisable by the slack condition of the customary building trade on account of the war.

While naturally no definite figure can be given it is expected that fairly large quantities of lumber will be required for hut construction before the coming winter. There is no prospect that lumber will be any cheaper in the United Kingdom or as cheap as it is now. Since November, Sweden has not been able to ship freely. The Baltic is absolutely cut off. Archangel as a lumber shipping port is a very uncertain factor; vessels going there with munitions may bring back lumber, otherwise it is expected the port will be used chiefly for the war shipping requirements of Russia. The Eastern Canadian supply may be sufficient to fill the remainder of the requirements of Great Britain, but it appears likely that additional material will be needed. The only additional sources of supply are the yellow pine and Douglas fir regions.

If a supply is needed in addition to what can be secured from Europe and Eastern Canada the Government will be forced to pay the existing freight rates or carry the lumber in Government transports, which amounts to the same thing. In that case no opportunity should be lost of shipping Douglas fir and hemlock stock in merchantable grades, shiplap and inch stock, 2 by 4 and 2 by 6. The distribution of a large amount of this stock in Great Britain would prove an invaluable means of making it known to the British timber merchants and British workmen. Under present conditions the material for huts cannot be sold in the United Kingdom unless a c.i.f. price of about $35 per thousand can be quoted. The possibility of getting it to Great Britain depends entirely upon the European and Eastern Canadian supply proving insufficient for the demand.

The number of inquiries received in London indicates a belief amongst lumber manufacturers and shippers both in the United States and Canada that the Scandinavian supply of boards and scantlings on dimension is either cut off by the war or insufficient, and that it should be commercially feasible to ship such material from the Pacific coast. The facts of the situation are as follows: Sweden alone exports 4,000,000,000 feet board measure of this timber each year, practically all spruce and chiefly in the sizes stated above as used for huts. This timber was cut last year as usual, and the greater part of it is still piled up waiting shipment. The population lives by it, the financial interests have advanced money on it, and it must be sold. The normal European demand for this timber has diminished because of war; the only outlook for the Swedish timber merchant, therefore, is to sell it for war purposes, and in selling it for war purposes he has the active co-operation of many influential British timber merchants who have helped finance the logging and milling operations, and who must find a sale for the timber if they are to get their money back.

The f.o.b. price of Swedish timber has not increased; it remains at about $25 per thousand. The increase in freight rates from $3 per thousand to $10 per thousand from the Gulf of Bothnia has not given the Canadian timber any advantage in the English market for the reason that while the increase in the freight on the Swedish timber has been only $7 per thousand, the increase on the freight of Eastern Canadian timber has been even greater, and the increase on Western Canadian timber has been $20 per thousand. Canadian timber is therefore at a greater disadvantage in competition with European timber than it was before the war except in those articles which Sweden and Norway cannot supply, large timbers, railway sleepers, pine and clear spruce in large sizes. Another opportunity will be opened for Canadian timber as pointed out below, when reconstruction begins and European supplies are not sufficient for the demand.

Huts for Homeless Population

There are a great many rumors abroad concerning inquiries for lumber or ready-made houses for use when reconstruction is undertaken, and the dispossessed population of Belgium, Northern France, and Russia are enabled to return to their former homes. Large quantities of lumber will doubtless be needed, but no official inquiries for timber for this purpose have yet been made. The devastated land must first be regained. Rumors now in circulation should not be taken seriously. When the timber is needed it may be expected that inquiries will be made through reputable timber merchants and brokers. The timber needed to rehabilitate the homes and industries of nearly 20,000,000 people will undoubtedly be beyond the resources of the timber exporting countries of Europe. Not even the Eastern Canadian supply available for export will be sufficient for the imperative demands of reconstruction. Stock will be needed in all sizes and qualities. There will without doubt be an unusual opportunity to extend the export of timber from Western Canada. The opportunity cannot be realized, however, unless the manufacturers have prepared for it by securing in London active agents of good standing who will represent them in competition with those who are handling timber from other regions.

Military Works

The construction and maintenance of various military works within the widespread war zine furnishes a demand for large quantities

of timbers, practically all of which are yellow pine or Douglas fir. Such material when needed is required on short notice, and is purchased by the contractors or Government departments from stocks in the hands of merchants here. Heavy planks and timbers are used in all sizes. Where sizes greater than 10 inches by 10 inches by 30 feet are required Douglas fir is usually specified and purchased on account of its being cheaper in these sizes than yellow pine.

The Government departments endeavor to keep a stock of this timber for emergency work even in addition to the stock carried by the timber merchants. About ten cargoes are now purchased for delivery during the next five months which should, together with the stocks on hand, constitute a six months' supply. This timber is so essential that it will be purchased and transported at any freight rates. Further orders may be expected during the continuance of the war.

Shipbuilding Supplies

The war has greatly increased the demands for shipbuilding timbers.

The stage deals upon which the workmen stand while the ship is being erected have always been supplied in Dantzig pine from the Baltic and Germany. The specifications require planks 2 inches by 12 inches, 25 feet and upwards, averaging not less than 30 feet, a proportion not exceeding 10 per cent. being 14 inches wide. They must be free from sap, shakes, injurious knots and defects. Between 8,000,000 and 10,000,000 feet of this timber is required each year in the Government and private yards. The price has been $45 and $50 per M. feet b.m. Dantzig material being shut off now Douglas fir is for the first time specified in shipyards as being the only timber procurable in the required sizes. It is being found cheaper and stronger than the Dantzig material, and will probably be used permanently though it is not liked so well by the workmen because of its greater weight.

Similarly, Douglas fir is being used for shores or supports under vessels in the shipbuilding yards where Riga and Dantzig timbers were previously used. Douglas fir is preferred in some yards to yellow pine for this purpose, the yellow pine being thought to be too heavy and too brittle.

The demand for deck deals, five inches in width, 2, 2½, 3, 3½, and 4 inches in thickness, has increased, and will remain active so long as increased shipbuilding continues. This material sells c.i.f. at about $15.50 per hundred lineal feet for the 4-inch, and $11.60 for the 3-inch. It is purchased from merchants in the United Kingdom who carry stocks, or from agents or brokers representing Pacific Coast producers or exporters.

Aeroplanes

Pacific Coast spruce, known to the trade as silver spruce, is the only satisfactory timber for aeroplane construction. Large quantities are being purchased continually to maintain the air service of the Allies. The quality demanded is absolutely clear and straight grained, 3 to 6 inches in thickness, 10-14 inches and up in width, 10 feet and up in length, but preferably over 18 feet long. One order for 800,000 feet has been placed; the price in London, where all the stocks are carried, has varied from $170 to $250 per M. feet b.m.

This timber is purchased from merchants in the United Kingdom. The merchants buy direct from agents or brokers who represent Pacific Coast shippers or exporters. Liner shipments of 50,000 to 100,000 feet b.m. are in demand.

Clear Pacific Coast spruce in thin stock, one-half inch in thickness, is at times in demand for use in building certain types of naval vessels. Such stock is purchased from the supplies carried by dealers in Great Britain.

Railroad Sleepers

The strictly war demand for sleepers is limited to the requirements of strategic railways. The War Office has appointed a Canadian buying committee, and all Canadian supplies will be bought through that committee. One inquiry for sleepers has been issued, specifying either Douglas fir or pitch pine, and sufficient quantities of both timbers have been ordered to fill the demands of the British War Office for some time, so far as is foreseen at present.

An unduly large share of the orders for the increased supplies of Pacific Coast timbers have been filled by the United States shippers. The reason is not to be found chiefly in a lower price quoted by the shippers of the United States. It is due in great part to the fact that there is a very much greater representation of Douglas fir and spruce shippers of the United States in London than there is of Canadian producers. This is so much the case that an overwhelming proportion of the Canadian mills have no contact with the London market excepting through the United States shippers. The inevitable result is that the Canadian mill hears of the London business only through the United States agent, who in turn submits it to the buyer in London through his London correspondent. This course of business is unnecessarily indirect, and exposes the Canadian producer both to paying two commissions or profits, to making his quotations known to his competitors, and further prevents him from keeping in proper touch with the London market. It is very advisable that Canadian Douglas fir producers should consider the advisability of either individually or jointly establishing business connections with strong timber agents here as has been done by the shippers of the United States. Until Canadians do this they will be meeting in the London market the competition of United States shippers who have several strong representatives constantly on the ground working to get all the business, and managing to get 85 per cent. of it.

Reference has been made to a demand for such special products as spruce and decking. The Americans have a reputation here for being more ready to assemble or produce this stuff, and this readiness not only gets them the orders for the spruce and the decking, but frequently for the remainder of the cargo, of which it is to form part.

United Kingdom Box Shook Market

Opportunities for Canadian Spruce—Specifications for Orders Reported by Special Canadian Commissioner

Mr. H. R. MacMillan, Special Commissioner for the Dominion Government, who is now in Great Britain enquiring into the markets there for Canadian timber and lumber, reports from London, England, in part, as follows:—

The most active branch of the timber industry is the box shook business. Large shipments of military and naval supplies for the British forces and for the Allies have greatly increased the consumption of box timber.

The timber used is whitewood, a close-grained, tasteless, odourless wood, similar to Canadian spruce, and redwood (Pinus sylvestris) a reddish pine, close-grained, with a slight pine odour and taste. The whitewood is preferred, commands a slightly higher price and is used for food products. The whitewood and redwood usually come from the lumber shipping districts of Sweden, Norway, and Russia. The supply is now confined to Swedish and Norwegian shipments. The preference is for a whitewood similar in appearance, weight, and quality to the Swedish whitewood. These requisites are fully met in the white spruce of Eastern Canada and the silver spruce of Western Canada.

British Trade in Box Shooks

There are three well defined methods of supplying the British box trade. The first and most important is the importation of shooks, ready manufactured and bundled to the purchasers' specifications. By far the greater volume of trade is done in this manner. The users of boxes supply the established houses of shook agents with their specifications, the shook agent sends out the inquiries to the various mills for whom he acts as agent, selects the best quotations and forwards it to the box users. The box user selects the best quotation received from the several furnished by the various agents to whom he has submitted the inquiry. This is the important box business so far as Canadian manufacturers are concerned.

The agent who sells shooks should become a very important customer of Canadian box manufacturers. The present war affords the best opportunity that has yet occurred of introducing Canadian timbers. The f.o.b. price of Swedish box shooks has increased 50 per cent., the freight has increased from 27 shillings a standard to as high as 105 shillings; it is now 85 shillings. Boxes which usually cost 7 pence each here, now cost 10 pence each. Canadian freights have also increased but for box grades of lumber Canadian f.o.b. prices have not advanced. Further, the market for shooks is very active, the purchasers who in the past have always specified Swedish whitewood or redwood are more willing to accept trial shipments of Canadian wood. Agents are receiving important inquiries for large quantities of shooks every week. Swedish mills are still increasing their prices and taking their time in making quotations. Agents here state that for these reasons the present is an excellent opportunity to introduce Canadian box shooks. The shooks received from Sweden at present while sound, are very knotty and are built up of narrow strips 4 inches to 6 inches wide; Canadian shooks once introduced should be superior in appearance and quality and secure a preference in the market.

Dealings Through Agents

While it may be possible in a few cases to supply shooks direct from the mill in Canada to the large user, it will undoubtedly be found advisable and necessary in nearly all instances to deal with established shook agents in Great Britain. A list of these agents is on file at the Department of Trade and Commerce, Ottawa. (Refer File No. 1499.) The most important fact for Canadian box manufacturers to bear in mind is that the agent in the United Kingdom will not entertain f.o.b. quotations. The quotations must be made c.i.f. the designated port in cents or pence per box. The specifications always state the dimensions, finish, printing, bundling, and details of shipment. These must be rigidly observed, and it should be especially noted that all dimensions for planed or unplaned goods refer to the finished dimensions and as the Swedish goods are well manufactured the ship-

ment from Canada of poorly manufactured goods, or of shooks that do not come exactly up to the sizes specified, will make it difficult to establish trade.

All shipments of shooks made into this market are subject to arbitration. There is little possibility for the extension of Canadian business unless this custom is recognized. In cases where arbitration is necessary the agent works to protect the interests of the shipper.

It is customary for agents to charge the seller 5 per cent. on the f.o.b. value of the shipment for his services. For the 5 per cent. the agent guarantees the account to the shippers, thus preventing any loss through bad debts.

To sum up, the agent is in touch with all shook purchases and receives all inquiries, keeps his principals in touch with the market, represents his principal in cases where purchaser complains of shipment, frequently finances the shipper and guarantees the accounts to the seller. These services are performed for 5 per cent. on the f.o.b. price. Most of the buyers will not deal except with the established agents. Therefore it is imperative that Canadian manufacturers should get in touch with the established shook agents in Great Britain if they wish to do business with the United Kingdom.

Specifications for Forthcoming Contracts

In order that Canadian box manufacturers may make quotations and learn if it is possible for them to enter this market at the present time, the following specifications are submitted for cases for which contracts can be made immediately. The names of the firms to whom quotations should be made are on file at the Department of Trade and Commerce. (Refer file No. 1499.)

No. 5 W.
2 Sides 21″ × 11¾″ × 5/16″ in 2 pieces.
1 T 1 B 19½″ × 15¾″ × 5/16″ in 3 pieces.
2 Ends 15¼″ × 11¾″ × 3/4″ in 2 pieces.
4 Bars 11¾″ × 2½″ × 3/4″
} No piece for sides and ends to be under 3″.

No. 6a W.
2 Sides 16¾″ × 8¼″ × 5/16″ in 1 piece.
1 T 1 B 16¾″ × 11⅝″ × 5/16″ in 2 pieces rabbetted.
2 Ends 11⅛ × 8¼″ × 3/4″ in 1 piece.

No. 9 W.
2 Sides 23″ × 10½″ × 5/16″ in 3 pieces.
1 T 1 B 21½″ × 15⅞″ × 5/16″ in 3 pieces.
2 Ends 15¼″ × 10½″ × 3/4″ in 2 pieces.
4 Bars 10½″ × 2½″ × 3/4″

No. 1 L.
2 Sides 16⅝″ × 7⅝″ × 5/16″ in 1 piece.
1 T 1 B 16⅝″ × 11⅞″ × 5/16″ in 2 pieces rabbetted.
2 Ends 11¼″ × 7⅜″ × 3/4″ in 1 piece.

No. 4 L.
2 Sides 21¼″ × 11¼″ × 5/16″ in 2 pieces t. g. and glued.
1 T 1 B 19¾″ × 15¾″ × 5/16″ in 3 pieces.
2 Ends 15¼″ × 11¼″ × 3/4″ in 2 pieces t. g. and glued.
4 Bars 11¼″ × 2½″ × 3/4″

All of the above to be tied with cord in bundles of reasonable size and to be plainly stencilled—preferably in blue—on the same side of each bundle with the respective letters above mentioned.

The component parts of any side, top, bottom or end should be as far as possible confined to one set of measurements.

All measurements to be strictly actual throughout, not nominal, and all goods to be warranted of good merchantable quality, and to be in good seasonable condition before loading at port of shipment.

The wood to be dry, clean, evenly and uniformly cut red and/or whitewood, not exceeding 33 per cent. redwood, Canadian spruce accepted.

The prices to be c.i.f. Gartson, loaded under deck.

Box S. 3. Inside measurements 17⅜″ × 12½″ × 8¾″
2 Ends each in 1 piece 13⅞″ × 8¾″ × ⅝″ planed one side.
2 Sides each in 1 piece 18¾″ × 8¾″ × ⅜″ planed one side.
1 Top in 1 or 2 pieces 18⅝″ × 13⅛″ × 5/16″ unplaned.
1 Bottom if in 2 pieces 18⅝″ × 13½″ × 5/16″ unplaned
1 Bottom if in 3 pieces 18⅝″ × 13¾″ × 5/16″ unplaned.

The width of the tops is less than the width of the bottoms, in order to prevent any possibility of the tops overlapping the sides.

The boards are required for lock cornered boxes, therefore twice the thickness of the sides has been added to the length of the ends, and twice the thickness of the ends to the length of the sides, with an extra one-eighth inch in each case for trimming purposes. Not more than three different widths of boards to be shipped for tops and bottoms in any one shipment.

Special attention to be paid to the sawing and planing, which must be well and evenly done and all edges square.

All sizes and thicknesses are to be exactly as specified after sawing and planing.

The wood is to be of good quality, clean, dry, sound and well seasoned, free from wane, blue edge and loose dead knots.

The timber is to be delivered in securely tied bundles, and in clean dry condition, the buyers having the right to refuse to accept delivery of any tendered otherwise.

The bundles are to be plainly marked to distinguish ends, sides, tops, bottoms, and bars.

The widths to be marked on each bundle, as well as the box mark.

Bundling is to be done with strong cord in bundles of 25 pieces each.

Price to be c.i.f. Garston, loadtd under deck.

(A) Box.
2 Sides 18⅛″ × 12″ × 5/16″ in 2 pieces.
2 Ends 12⅝″ × 12″ × 5/8″ in 2 pieces.
1 T 1 B 16⅞″ × 13⅛″ × 5/16″ in 3 pieces.
4 Bars 12″ × 2″ × 5/8″

(B) Box.
2 Sides 21¼″ × 9½″ × 5/16″ in 2 pieces.
2 Ends 12¼″ × 9½″ × 5/8″ in 2 pieces.
1 T 1 B 20″ × 12⅞″ × 5/16″ in 2 pieces.
4 Bars 9½″ × 2″ × 5/8″

Wood to be dry, clean, evenly and uniformly cut red and/or whitewood, not exceeding 50 per cent. redwood. To be tied with cord in bundles of 25 pieces for sides, ends, tops and bottoms, and 40 pieces for bars, and to be stencilled—preferably in red—on the same side of each bundle with the respective letters above mentioned.

The component parts of any side, end, top or bottom should be as far as possible confined to one set of measurements.

The measurements throughout to be strictly actual, not nominal, and all goods to be warranted of good merchantable quality, and to be in good seasonable condition before loading at port of shipment.

The prices to be c.i.f. Garston, loaded under deck.

Quotations are also desired c.i.f. London for the following specifications in large quantities. A contract could be signed for 1,000 tons, 2,000 tons, less or more at the shipper's option. Quotations should state at what time delivery could be made at London.

Size 1. BACON BOX A. C.I.F. LONDON.
1 T 1 B 29⅜″ × 17¾″ × 9/16″ in 3 pieces.
2 Sides 30½″ × 9″ × 9/16″ in. 2 pieces.
2 Ends 16⅝″ × 9″ × 11/16″ in 2 pieces.
4 Bars 10⅛″ × 2″ × 9/16″
Wood to be all white, smoothly sawn and wire bundled.

Size 2. BACON BOX B. C.I.F. LONDON.
1 T 1 B 29⅜″ × 17¾″ × 9/16″ in 3 pieces.
2 Sides 30½″ × 8″ × 9/16″ in 2 pieces.
2 Ends 16⅝″ × 8″ × 11/16″ in 2 pieces.
4 Bars 9⅛″ × 2″ × 9/16″
Wood all white, smoothly sawn, wire bundled.

Size 3. PETROLEUM BOX C.I.F. LONDON.
Inside 20″ × 12½″ × 13″
1 T 1 B 21¾″ × 13¾″ × 5/8″ in 3 pieces t. g. and g.
2 Sides 23″ × 13″ × 5/8″ in 3 pieces t. g. and g.
2 Ends 12½″ × 13″ × 7/8″ in 3 pieces t. g. and g.
4 End Bars 14¼″ × 2½″ × 5/8″
2 Top Bars 13¾″ × 2″ × 5/8″
Wood red and/or white, and all boards smoothly sawn, handholes in ends.

Size 4. CHOCOLATE BOX B C.I.F. LONDON.
Inside 19¼″ × 12″ × 12⅛″
1 T 1 B 20½″ × 13¼″ × 5/8 in 2 pieces t. g. and g.
2 Sides 20⅝″ × 12⅛″ × 5/8″ in 2 pieces t. g. and g.
2 Ends 13⅜″ × 12⅛″ × 5/8″ in 2 pieces t. g. and g.
No piece under 4 inches wide. Timber to be first quality white, seasoned, free from shakes, wane, sap, dead, loose or large knots.

Size 7. JAM BOX C.I.F. LONDON.
Inside 15¾″ × 15¾″ × 7¼″
1 T 1 B 17⅛″ × 16⅞″ × 9/16″ in 3 pieces t. g. and g.
2 Sides 18¼″ × 7¼″ × 9/16″ in 2 pieces t. g. and g.
2 Ends 15¾″ × 7¼″ × 11/16″ in 2 pieces t. g. and g.
Wood red and/or white, smoothly sawn and wire bundled.

Size 8. CHEESE BOX C.I.F. LONDON.
Inside 16″ × 16″ × 12½″
1 T 1 B 17⅛″ × 17⅛″ × 9/16 in 4 pieces.
2 Sides 18¼″ × 12½″ × 9/16″ in 3 pieces.
2 Ends 16″ × 12½″ × 9/16″ in 3 pieces.
4 End Bars 13⅝″ × 2½″ × 9/16″
Wood red and/or white, with as much whitewood as possible, and sawn only.

Size 9. BISCUIT BOX A. C.I.F. LONDON.
1 T 1 B 23⅜″ × 12¼″ × 9/16″ in 2 pieces t. g. and g.
2 Sides 24½″ × 14¼″ × 9/16″ in 2 pieces t. g. and g.
2 Ends 11⅛″ × 14¼″ × 11/16″ in 2 pieces t. g. and g.
Wood all white, sawn only and wire bundled.

Size 12. RUM BOX C.I.F. LONDON.
Inside 27½″ × 8″ × 8″
1 T 1 B 28⅞″ × 9⅛″ × 9/16″ in 2 pieces t. g. and g.
2 Sides 30″ × 8″ × 9/16″ in 1 piece.
2 Ends 8″ × 8″ × 11/16″ in 1 piece.
1 Centre 8″ × 8″ × 9/16″ in 1 pieec.
Red and/or whitewood, sawn only and wire bundled.

Box 15. CLOTHING CASE A. C.I.F. LONDON.
Inside 35″ × 20″ × 13″
1 T 1 B 36″ × 21″ × 1/2″ in 3/4 pieces t. g. and g.
2 Sides 37″ × 13″ × 1/2″ in 2 pieces t. g. and g.
2 Ends 20″ × 13″ × 1/2″ in 2 pieces t. g. and g.
4 Bars 14″ × 3″ × 1/2″
2 Bars 21″ × 3″ × 3/8″

All thicknesses to be nominal, i.e., 1-16 inch less than stated. No boards to be less than 4 inches wide. Wood red and/or white, sawn only and wire bundled. All parts may be lock-jointed in one piece at shippers' option.

Box 27. BISCUIT BOX E. C.I.F. LONDON.

Inside 22⅛" × 11⅛" × 14"
1 T 1 B 23½" × 12¼" × 9/16" in 2 pieces t. g. and g.
2 Sides 24⅝" × 14" × 9/16" in 2 pieces t. g. and g.
2 Ends 11⅛" × 14" × 11/16" in 2 pieces t. g. and g.

Wood red and/or white, with as much white as possible. Sawn only and wire bundled.

For the information of shippers it may be stated that specification size 1 ships at 249 to the ton; size 9 at 306 to the ton; size 3 at 247 to the ton, and size 27 at 308 to the ton. (All tons are tons shipping measurement.)

"A" box sells here now at 7.85 pence each, "B" box at 7.15 pence each, size 1, at 19.5 pence, sie 3 at 18 pence, size 9 at 16.25 pence, size 27 at 16.25 pence. These prices are the present abnormally high prices; they may be yet a little higher when quotations are received, if freights from Sweden do not drop. They serve to show the Canadian manufacturer the prices that must be met.

SPECIFCATION OF LONG BOARDS.

There is a demand at the present time for spruce boards and bars for use in the large box factories. Specifications are given below for which quotations are desired c.i.f. Liverpool.

Widths. From 3" to 7" and upwards.
Lengths. From 8 to 12 feet. Minimum length to be 8 feet.
Thickness. 3/16", 5/16", 3/8", 1/2", 5/8", 3/4", 1".
Bundling. To be securely tide in bundles with strong string as follows:—
3/16", 5/16", 3/8", 12 pieces per bundle.
1/2" and over, 6 pieces per bundle.
Planing. All thicknesses are understood to be finished. Quotations are required for planed and unplaned boards in accordance with above details.

LONG BOARDS

5/16". 4—5½" 6—7" 7½—8"
8¼" 8¾", 9", 9⅜", 10—10½"
3/8". 5½"—6½"
7½"—7⅞"
3/4". 4½"—7" 7½—8"
8¼", 8¾", 9", 9⅜" 10—10½
7/8" 6½"

The widths of all the above boards to rise by ½-inch, approximately equal quantities of each measurement, excepting where otherwise stated. The lengths of all the above to be 5/12 feet and intermediate half feet to be supplied as well as even numbers.

Prices to be per Petrograd standard.

Boards to be securely tied with cord in bundles of five pieces for ¾-inch upwards, and ten pieces if less than ¾-inch.

BARS.

2" × ¾" 2" × 1"

The lengths to be 4/15 feet, and intermediate feet to be supplied as well as the even numbers.

The price to be per Petrograd standard.

The battens to be tied with cord in bundles of twenty-four pieces.

Timber to be red and/or white, not exceeding 33 per cent. redwood.

LONG LENGTHS.

5/16". 7" wide in 6', 7½', 9', 10½', 11½'
7¾" wide in 6', 8½', 10', 11½'
3/4". 7" wide in 5½', 6½', 7½', 8½', 9', 10', 11', 12'
7¾" wide in 5½', 6½', 7½', 8½', 9', 10', 11', 12'
5/16". 4—5½" 6—7"
5/8". 4—7"
3/4". 4—7" 8—9" 9½—10"
3/8". 4—7"
1/2". 4—7"

The widths of the above to rise by ½-inch approximately, equal quantities of each measurement, except where otherwise stated.

BARS.

5/8" × 2" 3/4" × 2½"

The lengths of all the above to be 5/12 feet, and intermediate half feet to be supplied as well as the even numbers, unless otherwise stated.

All prices to be per Petrograd standard.

The boards to be securely tied with cord in bundles of five pieces for ¾-inch and upwards, and ten pieces if less than ¾-inch.

The battens to be in bundles of twenty-four pieces.

The wood may be in red and/or white, but not exceeding 33 per cent. of redwood.

Quotations are desired c.i.f. London for the following specification, and large quantities of this box are constantly used:—

BISCUIT BOX.

Ends 11¼" × 14⅛" × ⅝"
Sides 24⅜" × 14⅛" × ½"
T & B 23 5/16" × 12⅜" × ½"
All actual measurements.
No planing required.

English Wood Block Requirements

Good Opportunities Reported for Supplying Canadian Timber—Details of the Trade

From time to time Canadian manufacturers have looked into the feasability of supplying wood paving blocks for the use of municipalities in the United Kingdom, says a recent report of the Department of Trade and Commerce. The existing situation has stimulated several recent enquiries regarding this trade. These have referred both to crosoted and uncreosoted blocks.

While some few municipalities might be willing to purchase untreated paving blocks from abroad, more particularly where such bodies do their own creosoting, there appears to be no possibility of shipping already-creosoted blocks to this country, if only for the reason that the nature and extent of the creosoting varies considerably according to the views of the different bodies and also to the particular variety of timber employed. An equally potent reason is that the majority of the municipalities obtain their supplies from resident manufacturers of blocks of all kinds, most of whom possess creosoting plants, and who are not only experts in everything that pertains to the industry, but keeping in constant touch with the engineers and other officials of public bodies, and carefully studying their wishes, form a convenient channel of supply with which non-resident block manufacturers would find it difficult to compete.

The majority of these manufacturers cut their own blocks besides attending to the creosoting process, but if sufficient inducement could be offered, it is possible that some of them might be willing to purchase the blocks cut to dimensions.

It is, however, the opinion of those who have studied the trade, that Canada would stand a much better chance of supplying the timber than the finished block, and at the present time, when there is difficulty in obtaining supplies of practically all kinds of timber from customary sources, opportunities for Canadian trade are unusually favorable.

Kinds of Wood Required

The most suitable woods are red pine, spruce, fir, and business might be possible in tamarack. The dimensions in greatest demand are: 3-inch by 8-inch, averaging 16-foot lengths; 3-inch by 9-inch, averaging 16-foot lengths. Although quotations fluctuate constantly, the selling price for such material at the present time is about £16 10s. per standard of 1,920 board feet (Canadian measure), against an average price before the war of about £11 10s.

While certain of the block manufacturers might be prepared to purchase timber direct, as a rule they obtain their samples through the large wood brokers and agents who under these circumstances would be the best people for Canadian shippers to approach in the business.

Most of the large block makers have a knowledge of the qualities of Canadian timbers, but the present shortage of certain woods in principal use for block-making—notably red pine—affords a favorable opportunity for impressing upon both block manufacturers and users the equal suitability of particular Canadian timbers for the purpose.

Indian Railways Like B. C. Ties

Victoria, B.C., July 3rd: The Hon. W. R. Ross has received information from the Agent-General for British Columbia to the effect that the cargo of 160,000 creosoted Douglas fir ties shipped to India to the order of the Bengal and North-western Railway last fall per the steamship "Queen Helena" have arrived, and have given full satisfaction. The ties are described in the words of the agents in India as being "an all-round good lot, well cut, of full dimensions, and well creosoted." The Agent-General goes on to say that he has been requested to convey the thanks of the Railway Board in London to the Government of British Columbia for undertaking the inspection and despatch of the ties. This order was secured for the province as a result of strenuous efforts on the part of the Minister of Lands, and the Agent-General in co-operation with the Canadian Trade Commissioner, in London, the Railway Company stipulating that the B. C. Government undertake the inspection of the ties before shipment. Further orders for the Indian railways were in prospect, but the lack of tonnage has caused them to be held in abeyance. There is every hope however, that when the shipping offers, those orders will be placed, the success of the trial order leading naturally to further business.

Editor Canada Lumberman:— Vancouver, B. C.

We wish to compliment you on the Export Number of the Canada Lumberman. It contains a lot of valuable information that is especially useful in our line of business. Timms, Phillips & Company, Limited.

Export Lumber Trade Problems

A READER'S ANALYSIS OF THE VIEWS PUBLISHED IN THE EXPORT NUMBER OF THE CANADA LUMBERMAN

Editor Canada Lumberman: Vancouver, B.C., June 21, 1915

In your Export Number of June 1st, numerous opinions on the lumber export business give food for considerable thought. On page 109 an article appears setting forth the need of Canadian commission firms and showing the detriment to the Canadian lumber export business by doing business through the American brokers. Further along, on pages 119 and 120, Mr. C. Gardner Johnson writes an interesting article on transportation, ship owners and brokers, and makes mention that B. C. brokers are not strong enough financially. An answer to both these articles on page 93, Timms, Phillips & Company, Limited, states that B. C. manufacturers are very apathetic when export orders are mentioned, whereas on the contrary, Washington and Oregon manufacturers are very keen to consider business from wholesale firms either in Vancouver or elsewhere. This would indicate that while in a sense Mr. C. Gardner Johnson's opinion of the B. C. broker is fairly substantial, it is not entirely so, as it seems that some of our brokers are able to obtain export business and are doing considerable export business, most of which they are compelled to place with Washington manufacturers. It is a known fact that the manufacturers do not care to do business with Vancouver wholesalers, otherwise known as brokers, who take 2 per cent. discount on the presentation of the bill of lading, but on the contrary will take business from almost any wholesaler or commission salesman in Winnipeg. This probably holds true in the export business insofar as Vancouver and San Francisco brokers are concerned.

On page 118a we find Mr. E. H. Newton severely criticizing the manufacturers doing business with the broker in the following words:

"We often hear things said about the large corporations controlling in business, and crowding the smaller ones out, but this does not apply to the shingle or lumber industry, for here it is just the opposite. The large manufacturer goes into the business with a large investment upon a basis of permanency and with thoughts of legitimate profits, and after a time he finds himself surrounded by scores of competitors who have gone into the business in such a small way that they have practically nothing to lose and less to gain. They are not known in the market past the local broker, who has not only made it possible for them to begin, but who also hastens their end. He rustles the business and names the prices, and the manufacturer, who gets no reduction on his saws or anything used in the process of manufacturing, has got to come to his terms and accept his quotations. Such practises as these are what are handicapping our best mills and our best manufacturers to-day. We have some good mills and some that are not so good, managed by good men—as good and capable as are to be found anywhere, men who know how to conduct legitimate and successful business, but this is what you have to meet. I believe, though, that these last named, whose intentions are of the very best are suffering from extreme modesty. They are probably ashamed that they are in the lumber business, and perhaps this is why they do not make the fact known, but prefer to remain in seclusion, while the broker before referred to make the big noise, and attracts the attention of the prospective buyer."

Mr. Newton is correct when he states that the broker makes the big noise and attracts the attention of the prospective buyer. They do so purely and simply through efficient sales efforts, whereas on the contrary the mills employ the efforts of some commission representative on commission basis, whose only interest is the $10.00 commission per car. Every time the broker will secure the best salesman on a reasonable salary who will give his entire efforts to the end of securing the purchaser's order.

Energetic Solicitation of Business Needed

On page 94 the Canadian Western Lumber Company writes as follows:—

"I am fully alive to the necessity of developing our export lumber trade, and I think the work being done by the Forest Department and B. C. Government, as well as the Dominion Government, will be of great benefit to the lumber manufacturers, as well as to the province of B. C."

They are alive to the necessity of developing our export lumber trade, but what have they done towards cultivating or developing this business What system or plan, if any, have they adopted in the way of direct solicitation of this business? Unless they are extending their efforts to cultivate this trade, being alive to the need will not benefit them a great deal. Further, as regards the Forest Department of B. C. and the work they are doing for the welfare of the export lumber trade, it is indeed a very good move on the part of the Government, but it will not avail the lumber manufacturers a great deal unless they follow the Forest Department's efforts with a direct energetic campaign of solicitation. It will be much as the young man looking for a job, who had been out of employment for several months and stated he was willing to take anything to get work, and whose brother was offered a position at $80 a month. He, being employed, advised the party that he was working, but had a big husky and energetic brother who would be anxious to take the position. He was told to send his brother along, and immediately advised his brother of the position. Two or three days later he asked him if he had gotten the job, and in reply was told, "no, I have not seen or heard from the party." On being asked, "Did not you go and see him?" the answer was "No, he knew where I was." In the meantime someone else applied and was given the position. That is what will happen to the Forest Department's efforts unless followed up, as above stated, by a soliciting campaign on the part of the manufacturers. This gentleman also states that he is somewhat surprised that so many overlook the fact that all lines of trade are dull, and most particularly constructional materials, stating that this is a world-wide situation and while it is true that more business could be done if ships were available, at the same time there is not sufficient volume of business in sight to warrant any marked degree of optimism.

Certainly, the people are not overlooking these facts, but what the people are hollering about is the fact that the lumber manufacturers of B. C. are not obtaining their proportion of the export business that is being placed. Late reports show that since January 1st, 1915, and up to May 15th, 1915, twenty cargoes were shipped to Australia and only one of them was shipped from British Columbia, while nineteen went from Washington and Oregon. This would indicate that there are at least some vessels for transportation and a considerable business. He also comments on the Government hitherto showing in their exhibits a section of a log, or a very wide plank, or a very large square timber, and states none of these is particularly interesting to a builder, except that it interests him as a curiosity.

For advertising purposes the thing that will attract the attention and will interest a man's curiosity will undoubtedly awaken the fact that there are large logs in B. C. that could be cut to any dimension to serve the needs or requirements of this particular builder.

Further along, on page 120 Mr. Nielsen gives an interesting article setting forth some of the needs to develop export lumber business in B. C. headed under "The Timber Itself," "The Forests," "Cheapness of Manufacture," (which includes several sections: 1. Scientific and systematic logging. 2. Provision of the most efficient machinery. 3. Organization and efficiency in handling.) Further, he comments on the freighting vessels, at the present time. Mr. Nielsen sets forth the necessity of organization and efficiency in handling and the need of ships for transportation most specifically, and on page 121 Mr. A. C. Flummerfelt gives his opinion of the requisites of organization, which are as follows:—

"The organization of a shingle selling association managed by export mills, business being distributed pro rata to members of the association according to the mill capacity.

"Active support from the provincial and Dominion Governments in pushing the sale of British Columbia lumber in every market.

"Co-operation by the Bankers' Association of Canada, so that the financing of bills of exchange should be shared among the banks, just as the export of lumber would be shared among the mills.

"The establishment by the Government of some system of royalty rebates or ship subsidies so as to guarantee the necessary minimum supply of shipping which will secure the progressive, continuous growth of a solid export trade for British Columbia lumber."

It is needless to state that Mr. Flummerfelt agrees that organization is necessary, but in answer to the Provincial Government, this is as beforementioned, of no avail if not followed up by the lumber manufacturers.

Further along, Mr. Newton, on page 118a, shows the need of obtaining intelligent salesmanship in order to cultivate the export lumber under the heading, "Give us the Business.'

Preferences and Import Duties

On page 112a Mr. E. J. Palmer refers to the recent trip to this country of Mr. Nielsen, Australian trade commissioner, to place lumber orders, as prominently setting forth the necessity of the manufacturers owning and operating a transportation line in order to cope with San Francisco brokers, or more especially, Hinde Rolphe, W. R. Grace, and Robert Dollar. Mr. Palmer shows the advantage obtained from the subsidizing of the Allie line of steamships by the Government. He also states the benefit derived from the 2s. preference with South Africa, and farther on in his article he shows how little good has been done by the advantage of a 7½ per cent. duty recently established on all rough timber entering Canada from the United States, which is approximately 50c. per thousand. It is a fact that 7½ per cent. is not sufficient to prohibit the importing of lumber from the United States, but certainly Mr. Palmer does not or should not hope to impose a duty on the consuming trade in Australia sufficiently large to make it possible for Canada's manufacturers to secure the Australian business. Why should the Australian Government force its constituencies to pay a premium to do business with Canadian manufacturers? In my opinion the Canadian manufacturers should induce their Government to release them from the excessive duty on mill and logging supplies, and also to reduce the Govern-

ment royalty, which would more readily make it possible for the Canadian manufacturers to compete with American manufacturers for the Australian trade, as well as for all the export trade.

Mr. MacMillan, on page 118, under heading of "Export of Finished Products should Increase," states that a natural development of the export trade both in the east and the west will be a gradual increase in the proportions of more highly manufactured material shipped. Timber and rough lumber should decrease, while pulp and paper, pulp products, doors, wood finish and trim, and manufactured wooden articles, should increase. Canada should consequently be always in a position to compete favorably with manufactured forest products where she can compete with any manufactured articles. Three-quarters of the country will produce timber only. Canada cannot be a great trading or commercial country unless that three-quarters of the area is productive, supporting timber industries; effective forest fire protection is therefore essential throughout every province of Canada."

I question the possibility of the Canadian millmen manufacturing cheap ly enough to compete with American manufacturers, which again is practically due entirely to the excessive cost of mill operations and mill supplies, as well as logging supplies, owing to the duty on same. When one remembers that a mill in Seattle that cost $100,000 to build and equip, would cost $150,000 (at least) in Vancouver, and the cost of maintenance will continue to be in the same ratio, how can Mr. MacMillan expect the Canadian manufacturers to compete with American manufacturers when their first costs are 50 per cent. greater.

After considering all these conditions, there seems left but one answer, that is:—

First.—Reduction of duty on mill and logging supplies and a reduction of the royalty imposed by the Government.

Secondly.—Organization of a trading and transportation company to facilitate shipping.

Third.—A direct organized campaign of solicitation and advertising by the lumber manufacturers, and increased efficiency in the sales department.

A direct campaign by the lumber manufacturers and the trades papers to secure subscriptions for the different trade journals amongst the foreign merchants would be a very good step to take in the way of advertising, as this would constantly put before the different merchants the Canadian lumber manufacturers' ability to serve them.

Trusting you will give above space in your next issue of the Canada Lumberman, I remain,

Very respectfully yours,

Harry G. Hayes.

Hardwood Grading Rules Needed in the East

Editor Canada Lumberman: Woodstock, N.B.

I am very strongly of the opinion that there is something lacking in the grading of our lumber exported, especially in the hardwoods. We have an especially fine grade of birch in New Brunswick, large sections that have never been cut over simply because it cannot be handled at a profit, to my mind all on account of the lack of grading rules.

Some years ago we used to handle a small quantity of hardwood each year, which was used for shipbuilding and repair purposes. For this we received $15 per M. f.o.b. cars at shipping point. At this price there was no money in the business and we dropped hardwood altogether.

I think it is up to the timber manufacturers and exporters of lumber from Canada to establish a set of grading rules, more especially of hardwood, as our neighbors to the south of us have done, and to be prepared for increased business when the European war is over.

There is bound to be a big demand for our forest products in the future if civilization does not turn into barbarism altogether.

Trusting that your efforts to bring this subject to the attention of the trade will bear fruit abundantly.—Smith Lumber Company.

B.C. Mills Should Control Tonnage

Editor Canada Lumberman:

The writer has had considerable experience in the handling of cargo business and for two and one half years prior to the organization of this company, was Seattle Manager for Messrs. W. R. Grace & Company, the large steamship and exporting concern. Replying to your enquiry as to why so much of our lumber has to be shipped through San Francisco brokers, would say that our company was organized with the idea of counteracting this situation in every way possible, and so far the results of our efforts appear to be very good.

The fact of the matter is, that the present centre of the export lumber market is San Francisco. There, you will find all the large exporting concerns. San Francisco has for years been the largest sea port on the North Pacific coast, and it is but the natural result that the exporters there in time grew to the point where they practically control the export lumber business. Many of these concerns have sub-offices or agents in either Seattle or Tacoma. It is our idea that by opening an office with headquarters at Vancouver and having another office in Seattle being closely in touch with the mills, that eventually we will be able to sell direct to the buyers instead of handling through the exporters in San Francisco as has been done.

This year we have sold the first cargo of lumber which the Government of New South Wales at Sydney have purchased direct. In the past they have bought their lumber through the importers in Sydney, who in turn have placed the business before the exporters in San Francisco, who in turn have worked the mills of the Pacific North West. This cargo was purchased and shipped from British Columbia.

This month we have chartered the Schooner "Blakely" carrying 900,000 feet of lumber, and will ship a second cargo to the Australian Government. This is the fifth cargo which we have sold this year, but these are the only two which have been sold direct. Owing to the great scarcity of tonnage, it was necessary for us to place the "Blakely" cargo with the mill on Puget Sound that had control of the vessel, in order to secure the carrier.

British Columbia exporters are at some disadvantage over the exporters from the American side owing to the fact that most of the sailing vessels are owned in the United States and they require 2/6 more freight per M. feet to load a cargo in British Columbia over the American side. There are many reasons why they require 2/6 additional freight from this side.

Again the manufacturers on the American side are quoting their lumber at from 50c. to $1.00 per M. lower than are the manufacturers in British Columbia.

The mills in British Columbia should own and control tonnage. The timber from the British Columbia side is finer grained and has a greater tensile strength than the timber cut to the southward and is worth the difference in price that the mills are asking, but the question is whether or not the buyers in Foreign markets will recognize this difference and pay the price.—Canadian Trading Company, Limited, C. M. Pettibone, President.

An Important Pulp and Paper Merger

Widespread interest is being taken throughout Canada and the Northeastern States in the proposed merger of pulp and paper companies which has for its chief object the development of paper manufacturing plants dependent upon Canadian pulp, and located at points close to the large news print consuming centres of the northern and eastern States. The president of the North American Pulp & Paper Company, by which name the merger is known, is Mr. J. E. A. Dubuc who has been working upon the proposition for many months past. The chief object to be obtained is the improvement of the service furnished by mills to the consumers of news print. It is estimated that the efficiency of this service can be increased in some cases many hundred per cent., simply by establishing economically operated mills in the neighborhood of the large publishing companies. In the past it has been customary to believe that a news mill should be located far from the centres of consumption in some forest so that the wood for the manufacture of sulphite and mechanical pulp will be convenient to the plant. The result has been many exasperating and expensive delays in furnishing the requisite supplies to the pressrooms.

The proposed merger calls for the construction of a number of paper mills close to the centre of consumption, all accessible by water, by means of which mechanical pulp and sulphite may be imported from Canada to supply the mills with their raw material. Water transportation will provide the lowest freightage from the pulp mill to the news plant and the news plant will thus be in the "back yard" of the publisher. The timberlands controlled by the merger are of great extent, comprising freehold and Crown licences for about 1,360,000 acres, the contents of which are estimated at about 22,000,000 cords.

The Chicoutimi Pulp Mills at Chicoutimi, P.Q., which are controlled by the company, have a capacity of 90,000 tons of ground wood pulp per year, and, if it is found necessary this output will be increased. The St. Lawrence Pulp & Lumber Corporation at Chandler, P.Q., which has recently started operating is also in the merger. This corporation's plant has an annual capacity of 36,000 tons of sulphite, and the company intend to double their production in a short time. Plans are already under way for further construction. These mills when enlarged and operating at full capacity will be capable of supplying sufficient pulp to keep a number of large news plants well supplied. Among the news print mills drawing their supply of pulp from the pulp mills will be that of the Northern Pulp & Paper Company known as the "Tidewater" mill in Brooklyn, N.Y. This mill looks after the needs of New York City and its vicinity. The raw stock is shipped from Canada by vessel. The company state also that in the future, if they find it necessary, a news print mill will be erected at Communipaw, N.J., possibly to be known at Tidewater mill No. 2. A site has also been secured at Chester, Pa., where is it planned to build a mill to handle the news business in Philadelphia and neighborhood. Pulp will be shipped to this mill over the same route as to the Tidewater mill. An option is also being held on a site in Cleveland, Ohio, where a mill may be constructed for handling business in that locality. Thus far these are the only prospective mills which have been directly considered. However, the scheme goes even further and contemplates a mill at Detroit and another at Buffalo. At each of the latter points excellent shipping facilities are provided for the transportation of pulp from Canada by water, and these centres are recognized as the largest news paper consuming districts in the country.

Nothing definite has yet been made public as to how soon these plants will be put into effect, or to what extent they will be developed.

Eastern Freight Rates Case Concluded

J. R. Booth and Senator Edwards Present Concise and Striking Statements in Opposition to Proposed Increase on Lumber

Ottawa, July 5 (Special to the Canada Lumberman): The Eastern Freight Rates Case, so far as the taking of evidence was concerned ended on June 30th after being before the Railway Commission exactly four months. It is expected that judgment will be given by the Board of Commissioners some time next month. It is hardly possible that any earlier decision can be made owing to the enormous amount of evidence to be considered carefully. The case arose out of an application of the railways for a general increase in freight rates on all lines east of Port Arthur. Protests were registered from all classes of manufacturers and shippers, but none were more emphatic or sincere in their objections than the lumbermen. It is significant that the last protest made was made by Mr. J. R. Booth, the veteran lumberman, and Senator W. C. Edwards, head of the firm that bears his name. Both urged that in the face of existing conditions the present time is not opportune for raising freight rates. Both speakers agreed that the lumber business was never so slow as it is to-day in all their experience, which in Mr. Booth's case covers 63 years, and in Senator Edwards' 50 years.

Senator Edwards' Views

When the case was called at the final hearing Senator Edwards said:—"I understand, Mr. Chairman, that it is desired that a short statement shall be made on the part of the lumbermen.

"It seems to the lumbermen a most extraordinary proceeding to ask for any advance in rates at this time. An advance in rates some three or four years ago, when wages were abnormally increasing in Canada, and the cost of operating and producing was enormously increasing, might have had some reason; but at a period in the history of Canada, as well as in the history of the world, when the whole scale of living and doing in every respect has got to reduce, and materially reduce—and the country which does not reduce in the cost of producing and the cost of doing everything will in the years to come be left behind in the race—at such a period, for the railways to ask an increase in rates is, I assert, most inopportune.

"Now I understand that statements have been made that because lumber has increased in value in years past, that is a good reason for advancing rates. It would be a corresponding good reason to-day to say that because wheat has almost doubled in value the rate for carrying wheat should also abnormally increase. I do not think that these are arguments of any utility whatever.

Nor is the cost of operating railways an argument to-day. It is conditions that should govern. And the conditions are that Canada —not at all because of the war, entirely apart from the war—was slated to pass through a time of extreme depression. The reason for this condition is not the war at all, but the abnormal development which Canada passed through for many years prior to 1914.

Too Many Railways Constructed

"No one is going to say one word against the railways. The lumbermen have nothing to say against the railways. We all desire that the railways shall prosper. But unfortunately for Canada she got drunk about fifteen or sixteen years ago and had enormous ideas as to her future possibilities, and during that period the Canadian people, and the Canadian public men as well, believed that railways could not be built fast enough to keep up with the general development of Canada.

"To-day every one sees clearly that a serious mistake was made; that railways and railway construction went far beyond the immediate or the prospective requirements of Canada; and if an inquiry was made to-day as to how many of the railways or portions of railways we might dispose with in the best interests of Canada, I think it would be a far more reasonable thing than coming here to-day to ask for an advance in rates.

"The fact is that Canada has more miles of railway for its population than any country in the world; and the fact that our population is a sparse one, scattered over an enormous area, necessarily makes our transportation expensive; and when you have two or three railways doing the work which one is capable of performing, then it is not an advanced rate that is required to maintain three railways, but it is a dispensing with some of the railways.

"I mentioned the argument that the increased cost of materials was not a justification for an advance in the rates of carriage. I have tried to give my reasons why. Now I will admit at once that it is true that the price of lumber from the year 1896 to the year 1914 advanced materially; but I am prepared to prove positively that the cost of producing enhanced materially more than did the selling price of the product. There is no question at all about that. But I have stated that these are not reasons for advances or the reverse. But I do state this emphatically and positively, and I am prepared to prove it; I have been for fifty years manufacturing lumber, and I say without hesitation that the lumber trade of Canada is passing through a period to-day such as it has never experienced in fifty years so far as conditions are concerned, having regard to the cost of production, the opportunities for selling, and the price which is obtained. I venture to say without any question at all of doubt that if an investigation takes place as to the relative positions of the lumber trade and the railways—dispensing of course with unnecessary railway lines—that the conditions are not parallel at all. The lumber trade is suffering, and suffering very materially more than any justified railroad in Canada is suffering.

"Therefore, I maintain, Mr. Chairman, that the suggestion even of an advance of a half cent on lumber east of Port Arthur is not justified by any presentation that may be made to your Honourable Body, but it would be most justifiable to come here to-day and demand a very material decrease in the existing rates.

"I do not think, Sir, that I can add anything more at present."

Mr. J. R. Booth's Opinion

Mr. J. R. Booth said: "I do not know that I can add anything to what Senator Edwards has said. I do not think that the railroads require any proof of the present depression in the lumber business. I am sure they feel it as much as the lumbermen do, and I am surprised that the railroads should seek at this time of depression, any advance in the rates for the handling of lumber. I think it is an inopportune time. I think they should wait until conditions get normal before they undertake to disturb the present rates. I consider that we are passing through the most serious time that we have had in my experience of 63 years in the lumber business, and I would be very sorry to see anything happen to disturb the conditions.

The Chief Commissioner: We have been told, Mr. Booth, that your net prices are a good deal lower now, although your gross prices are in excess of what they have been. I suppose you agree with that?

Mr. Booth: The price of lumber now is from $4 to $10 a thousand less than it was last year. But that is not the worst of it. It is not moving at all.

The Chief Commissioner: The fact that it is not moving at all is the great difficulty.

Mr. Booth: We need not tell the railroads that. They know better than we do that it is not moving. Although there is no doubt that the railroads feel the depression, they should not seek to put it on the lumber men.

The Chief Commissioner: You think you have all that you can carry?

Mr. Booth: Yes, we think we have all we can stand ourselves.

Mr. J. F. Orde, K.C., counsel for the Dominion Government. spoke strongly against the application, and urged the board to consider seriously what Senator Edwards had said about the duplication of lines.

Mr. Calvin Lawrence, legislative representative for the Brotherhood of Locomotive Engineers, spoke in favor of the railways being given a rate that would enable them to maintain a scale of wages satisfactory to the employees.

The arguments of the respective counsel were short and to the point.

A Good Outlook for B. C.

Mr. J. C. Shields, of Vancouer, B.C., recently visited Toronto, and in the course of an interview stated that progress was already being made in the direction of enlarging British Columbia's export markets for lumber. Mr. Shields has recently been in China and Japan for the purpose of securing trade connections for his firm and is very hopeful of the future possibilities for an export trade in lumber with the far east. Along the Yang Tse Kiang River alone, he says, 180,000,000 feet of lumber and timber are imported annually, which has been coming chiefly from the mills of the Pacific Coast States. Canada had not been supplying any of the huge demand from the Orient up till now, but British Columbia would get its share in the near future. Mr. Shields predicted a speedy recuperation for the lumber industry of British Columbia so soon as shipping facilities become more abundant on the Pacific Coast. Even with the small available tonnage large shipments of timber for railroad reconstruction have been made by the Panama Canal to Great Britain and France on Government contracts.

New Brunswick's Crown Lands Report

Record Net Revenue Results from Stumpage Tariff Increase— Satisfactory Forest Fire Figures

The net revenue of the Crown Lands Department of New Brunswick for the year ending October 31st, 1914, was the largest in the history of the Department, according to the annual report which has just been published. This is the result mainly of an increase in the stumpage tariff, and is not attributable to any increase in the cut of lumber.

The season's cut of all classes of lumber was nearly identical in quantity as compared with the output of the preceding year, there being a difference of slightly over a million superficial feet less than the cut of the logging season of 1912-1913.

The payment of the notes with a tenure of one year from 1st August, 1913, for the second one-quarter payment of the bonuses on the timber licenses, was well met and only a very small amount is still outstanding, with a promise of being paid, with interest, within a reasonable time. The same can be said with reference to the payment of the stumpage accounts, which in the aggregate was nearly $80,000 greater than in the preceding year.

All of the timber licenses, with trifling exceptions, were renewed, but very few applications were made for ne wground, showing that the remaining vacant areas are not considered valuable for lumber, and from the best information in the Department this vacant domain of about one million acres is largely barren, burnt and waste land.

Under the legislation passed at the session of 1913, progress is reported as regards the classification of the public lands of the Province. It is proposed, during the present summer, to make more extended explorations with a view of complying with the legislation referred to, and continuing the same during the following seasons, so that when the 1st July, 1917, arrives a fairly comprehensive amount of information will be received in determining the forest wealth of the Province.

One of the great difficulties in the administration of the Department is the continual conflict between the settlers, who apply for lands under the Labor Act, and the licensee. This difficulty is not confined to New Brunswick alone, but is the subject of like trouble in Quebec, and also in Ontario. While every facility is given to applicants in taking up lands for settlement it is found that the greater number of those applying do not carry out the provisions of the Act in bona fide making homesteads. Nearly all of the lands, so applied for, are also under timber license, and it was thought in fairness to the licensees they should have a reasonable time to remove the merchantable lumber. Accordingly an Order-in-Council was passed giving the licensee one clear logging season to conduct his operations on these lots, at the end of which time, if the homsteader did not live up to the requirements, these lots would be restored to the license. Then again many of the applicants for homes were found to have made considerable improvements, but were not bona fide residing on the lots applied for, and in many cases removing pulp-wood and other lumber without the payment of stumpage, making it extremely difficult for the Department to determine the rights of one or the other.

A partial solution of the difficulty will be met in setting aside lands in different parts of the Province, for the purpose of ascertaining what sections are suitable for agriculture, and when this is determined these should be set off for this purpose alone. Proper roads should be opened up, and a careful selection made of suitable settlers from among applicants for grants.

The Cut of Lumber

At the opening of the season it was thought the cut of lumber would not be up to the aggregate of the previous year, mainly on account of a dull market and an unfavourable wet fall, but as the winter set in better conditions prevailed, resulting in a substantial return from the scalers. As stated in previous reports a considerable quantity of the lumber cut was taken from lands that should have been reserved for a term of years, owing to the stands of merchantable size being largely removed. We cannot hope to propagate our forests if lumbering operations are allowed to be carried on, from year to year, practically over the same ground. Authority should be given the Department to close out certain lands that have been hard cut, for a stated length of time, when, if lumbering operations are continued as at present, licensees are bound to cut below the standard size. Then again large sections of the Crown Lands are held and have been so held for years where no operations are conducted at all, resulting in serious loss to the Province in stumpage dues. The lands referred to are practically virgin forests but at present largely inaccessible owing principally to the streams not being cleared out as a means of getting this lumber to market. On such lands large quantities of spruce, fir, and other lumber are dying annually, and consequently are a dead loss to the Province from a stumpage standpoint. The attention of some of the lessees has been drawn to this matter, and in some cases the Department will make a demand for stumpage at the rate of ten thousand superficial feet per square mile as specified in the regulations.

Export of Pulp Wood

When the present pulp wood law was passed, prohibiting the export of pulp wood cut upon Crown Lands, it was hoped the paper-making industry would be brought into effect. No more mills are now making paper than were established when the law was passed, and large lumbering firms in New Brunswick are now, and have been since the law was passed, engaged in shipping wood of this kind out of the country, to build up industries elsewhere, and thus robbing the Province of labor that properly belongs to us. It is the intention of the Government to enquire carefully into this matter and to take the necessary action.

Attention has been drawn to another matter of very considerable importance, viz.: The cutting of undersized lumber where it is claimed the growth is of a stunted nature or thicket growth. It is the settled policy of the Department to prohibit such cutting and refuse to grant permits for this purpose. The only apparent way to put a stop to this practice is to cancel the licenses or absolutely seize the wood.

Forest Fires

The Province was free from serious forest fires during the year, although in the latter part of May, and in the beginning of June many of these fires sprung up, and threatened destruction. Owing to the vigilance of the forest staff these fires were brought under control and suppressed. It is strongly advocated that a Lumberman's Fire Association be organized to work in conjunction with the Wardens of the Department, and there is no doubt if such an Association was formed and properly conducted, the fire evil would be greatly reduced.

The statement of receipts for the year includes the following amounts:—

Receipts	Year 1913	Year 1914
Sales of Timber Licenses	$ 18,169.50	$ 3,551.50
Renewal of Timber Licenses	81,236.00	81.292.00
Stumpage	305,818.62	385,624.64
Transfers of Timber Licenses	1,472.00	418.50
Bonuses Timber Licenses	255,335.76	162,288.00

The total receipts of the Department for the year 1914 were $722,-274.66 and for 1913 $773,274.74. The net revenue for 1914 was $554,-361.01, and for 1913, $501,554.05.

The receipts from timber licenses amounting to $81,292 covered 10,204 square miles, of which 10,150 square miles were covered by renewal licenses and 54 square miles was included in new applications.

The following table shows the quantities and kinds of lumber cut from Crown Lands, and the total stumpage for the year ending October 31, 1914:—

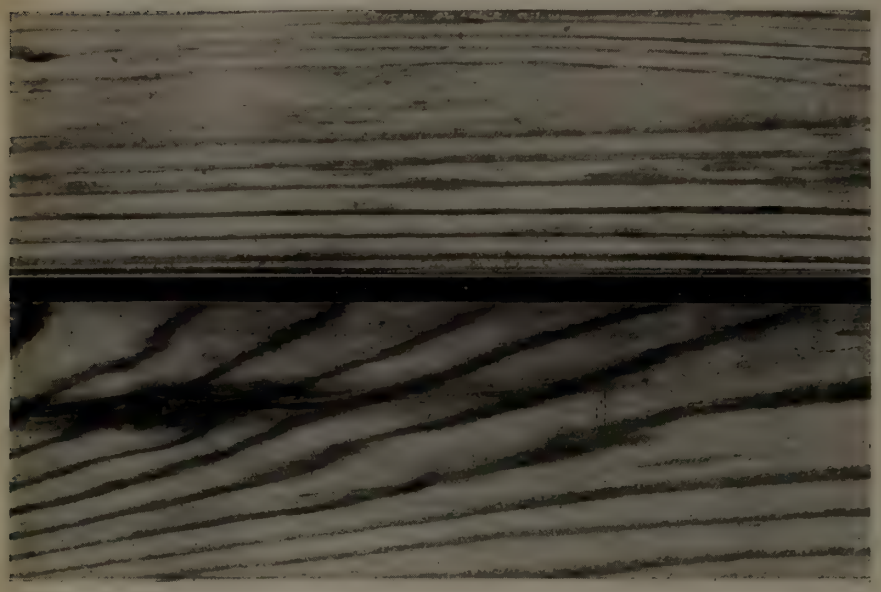
Qunatity	Kinds of Lumber	Stumpage
170,847,404 S. Ft.	Spruce and Pine Logs	$258,425.25
61,599,981 "	Fir Logs	73,919.97
20,436,890 "	Cedar Logs	30,655.33
2,809,489 "	Hardwood Logs	3,511.86
5,884,475 "	Hemlock Logs	5,378.41
7,576,990 "	Hemlock Logs, Peeled	
1,079,544 "	Poplar Logs	1,079.54
270,234,773 S. Ft.		
822 Cords	Wood (Fire and Pulp)	495.80
1,547 "	Hemlock Bark	1,237.60
199,938 Pieces	Sleepers	9,996.90
8,000 "	Posts	120.00
5,300 "	Telegraph Poles	665.62
	Add old Accounts $9,508.04	$385,486.28
	Less allowances 193.68	9,314.36
		$394,800.64
	Deduct unpaid accounts	9,176.00
	Paid Provincial Treasurer	$385.624.64

During the year there were 33 forest fires in the province which occurred in the following months:—May, 11; June, 8; July, 2; August, 6; September, 3; October, 3. The total estimated area burned was 4,881 acres, 3,345 of which were Crown Lands. The estimated damage to Crown Lands was $4,740.

Commercial Importance of Jack Pine

Technical Properties and Practical Uses of the Different Varieties of an Important Canadian Wood

By A. H. D. Ross



Top.—Western Jack Pine Bottom.—Eastern Jack Pine

In this article it is proposed to give a brief account of the technical properties and principal uses of what are generally known as the jack pines.

Eastern jack pine (Pinus Banksiana), is also known as Banksian pine, Gray pine, Scrub pine, Horn-cone pine, Prince's pine, "Cypress," and "Juniper." In French it is known as Pin de Banks, Pin gris, Pin chetif, Pin de rochers, and Cypres. It is a very hardy tree growing upon poor sandy soils upon which many other trees do not thrive, and in addition to this has a very wide range of distribution. On the better soils it is often mixed with paper birch, aspen poplar, and white pine, but on the poorer soils often takes complete possession—especially on burned-over areas. Its deep root system enables it to withstand drought better than trees with a shallower root system, and it is well suited for sterile, sandy soils.

The geographic range of eastern Jach pine extends from the western part of Nova Scotia, through New Brunswick to the Gaspe Peninsula, in Quebec, northward to the Great Whale River, around the foot of James Bay, westward between Great Slave Lake and Great Bear Lake and northwestward to the Mackenzie River. Southeastward it approaches the Lesser Slave Lake and extends eastward to the foot of Lake Winnipeg; thence around the foot of Lake Michigan and eastward to Maine.

Under favourable conditions Jack pine is a rapid grower and is a comparatively short-lived tree, but in rocky situations and far northward it is scrubby or dwarfed. In height, the trees range from 20 to 70 feet, and in diameter (4½ feet from the ground) from 8 to 12 inches—occasionally 80 feet and 18 inches. A study of 112 trees on the Matawin watershed, in Ontario, showed that 8-inch trees were grown in 46 years, and 12-inch in 98 years. In Minnesota, a tie-timber study of 74 dominant trees on good soil and 91 dominant trees on poor soil showed that 8-inch trees were grown in 31 and 45 years, respectively.

The sapwood is usually quite thick and nearly white in color, but the heartwood varies from clear pale brown to light yellow (rarely orange), is rather coarse-textured (occasionally medium to fine), weighs about 30 pounds per cubic foot when thoroughly kiln dried, is fairly soft, moderately durable and is fairly strong. Tests show that selected material containing 30 per cent. moisture had an endwise crushing strength of 5,600 pounds per square inch, a modulus of elasticity of 1,332,000 in cross-bending and a cross-breaking strength of 91,000. The wood is usually sound, seasons well, and is not difficult to work.

During 1913 some 97 mills reported the cut of eastern Jack pine lumber as follows:—

Province	Mills	Board Feet of Lumber	Average price per M
Ontario	47	24,297,000	$14.51
Manitoba	7	2,783,000	11.71
Quebec	30	1,100,000	16.00
New Brunswick	5	358,000	13.64
Saskatchewan	2	206,000	12.00
Nova Scotia	6	51,000	16.20

Only a small amount of lath material is manufactured from eastern Jack pine; the returns given for 1913 being 2,340,000 at an average price of $1.99 per thousand. For the same year the cut of Jack pine shingles is given at 1,218,000 at $1.53 per thousand. There was also reported a cut of 1,450 Jack pine poles at an average price of 90 cents each.

Western Jack pine (Pinus Murrayana) is also known as Lodgepole, Black pine, Shore pine, Scrub pine, and Spruce pine. This tree is very variable in character and ranges from the Yukon Territory throughout the interior mountain region of British Columbia eastward to Alberta and southward along the eastern slopes of the Rockies to California and eastward to South Dakota. The typical coast tree frequents sand dunes and barrens (occasionally pools and swamps) and is generally known as Shore pine or Scrub pine. In Alberta the eastern range of this tree is not far separated from the western range of the eastern Jack pine, and in the mills the two species are sawn and sold together. In British Columbia and in the Northwestern States western Jack pine is generally known as Lodgepole pine, which is the official name adopted by the U. S. Forest Service. Nevertheless, it is closely related to eastern Jack pine and is, to all intents and purposes, used for similar purposes. Like its eastern relative, it requires less moisture than associated species and is well adapted to dry, gravelly soils, but avoids limestone soils. In elevation it ranges from sea-level up to 11,000 feet, and the trees vary greatly in size. On the interior plateau and foothills they may reach a height of 70 or 80 feet, and a diameter of 2 feet (occasionally 100 feet and 3 feet), but on poor soils and at high elevations are only 15 or 20 feet high. A study of 47 trees in the Crow's Nest Pass in Alberta, and of 36 trees near New Denver, B.C., shows that 8-inch trees were grown in 40 and 70 years, respectively; and 10-inch trees in 65 and 94 years. In close stands the trees develop tall, clean, slender shafts with short, round, small-branched crowns having the appearance of larch (tamarack) rather than of pine. The bark of trees near the coast is purplish red-brown, with deep rough furrows and ridges which are sharply cross-checked, but away from the coast the bark of young stems is pale brown with a grayish tinge. As in the case of eastern Jack pine, there are only two needles in each cluster; as is also the case for red pine (Pinus resinosa).

The heartwood of coast trees is pale reddish-brown, of interior trees yellow or yellowish brown. In close stands the wood of both is straight-grained and fine-textured, weighs about 30 pounds per cubic foot, but is not very strong or durable. Usually the wood from the interior trees is less resinous and straighter grained than that of coast trees. The wood is rather difficult to season but works well, and sometimes shows a "pebbly" or "bird's eye" grain in tangential sections. Tests of specimens grown in Grand County, Colorado, show that the wood averaged 20.1 rings per inch, contained 44 per cent. moisture (based on over dry weight), had a fibre stress of 3,080 at the elastic limit, a modulus of elasticity of 1,015,000, a cross-breaking strength of 5,130, and an endwise crushing strength of 2,530 pounds per square inch. In the radial direction (pith to bark) the shearing strength was 672 pounds per square inch, and in the tangential direction 747 pounds; whilst the cleavage strengths per inch of width in the same directions were 142 and 140 pounds. Specimens from Johnson County, Wyoming, averaged 30.3 rings per inch of growth, and because of their denser structure proved to be a trifle stronger, but less elastic. In the case of the Colorado specimens, a reduction of the moisture content from 44 per cent. to 11 per cent. of the dry weight raised the modulus of elasticity from 1,015,000 to 1,384 000; the cross-breaking strength from 5,130 to 8,740, and the endwise crushing strength from 2,530 to 5,520 pounds per square inch—thus showing how very much stronger dry wood is than green material.

During 1913 some 8 mills in British Columbia reported a cut of 4,306,000 board feet of Jack pine lumber at an average price of $14.20 per thousand; whilst in Alberta 17 mills reported a cut of 2,237,000 board feet at $15.83 per thousand. Only a small portion of the Alberta cut was eastern Jack pine.

Jack Pine Ties

The greater portion of the Jack pine removed from the forest each year is used for cross-ties and fuel, and only a comparatively small amount for lumber, poles and posts.

For the year 1913 the total number of ties sold to steam and electric railways is given as 19,881,714, of which 7,773,674 were Jack pine; and for the year 1914 the total consumption of ties was 19,403,644, of which 8,379,064 were Jack pine. From these figures it

appears that in 1913 no less than 39.1 per cent. of all the ties used were Jack pine, and in 1914 the percentage rose to 43.2. In 1913 the average price paid for Jack pine ties was 40 cents, and in 1914 it was 43 cents. These figures include both the eastern and the western Jack pine, and whilst these trees are almost as widely distributed as spruce, it is of interest to note that in 1913 some 161,023 Jack pine ties were imported from the United States. The wood is fairly strong, and because of its cheapness and abundance is being used more and more for tie purposes. If untreated it decays rapidly in the roadbed, but if treated with creosote or other preservative material it makes good tie material. During 1913 some 709,227 Jack pine ties were treated before being laid in the roadbeds of the steam railways operating in Canada, and the equipment of the treating plants is being steadily increased. In the case of the sapwood, the springwood portions of the annual growth rings absorb creosote readily and with heavier treatments the summerwood (later grown) portions are also saturated. In the case of the heartwood, the resin canals are small, numerous, widely scattered, contain tyloses and assist in securing penetration of the summerwood portions of the growth rings. For the eastern wood, which has been thoroughly air-dried, there is little difficulty in securing a penetration of the sapwood and 1 or 2 inches of the heartwood, but in the western Jack pine the heartwood is very difficult to penetrate with creosote; the action being apparently confined to the longitudinal and radial resin ducts. In non-resinous portions of the heartwood even a pressure of 90 pounds per square inch for an hour's time did not penetrate lengthwise more than the length of 3 tracheids, whilst in the radial and tangential directions the penetration secured did not exceed the width, or depth, of six tracheids.

Jack Pine for Pulpwood

We are apt to think of spruce and balsam fir as the only woods which are used to any extent for pulp and paper, but the fact of the matter is that almost any kind of wood may be used for these purposes. During 1913 there were 1,109,034 cords of wood cut in Canada for pulpwood. Of this total quantity 68.1 per cent. were spruce, 25.5 per cent. balsam fir, 4.3 per cent. hemlock, and 1.7 per cent. Jack pine. In Quebec 13,327 cords at an average price of $6.04, and in Ontario 6,056 cords at an average price of $3.50 were cut—making a total of 19,383 cords.

In the case of western Jack pine, large quantities are used for mine props and lagging. Jack pine is used more than any other material, and over 75 per cent. of the companies use more or less dead timber—several of them using nothing else and finding it entirely satisfactory. There is no inherent difference between wood seasoned on the stump and wood cut when green and then seasoned. Actual tests show that fire-killed lodgepole pine is quite as stiff as western red cedar, and that the elastic values of the two are practically the same. Furthermore, sound fire-killed lodgepole pine is thoroughly seasoned and all ready for preservative treatment.

Wood-Using Industries of the Prairies

An Analysis of the Origin, Value, and Use of their Raw Material— Douglas Fir in the Lead Followed by Pine and Spruce

A bulletin upon the wood-using industries of the Prairie provinces has been issued by the Forestry Branch of the Department of the Interior. The bulletin contains statistics and reports relating to the origin, values, and uses of the various woods consumed, together with a discussion of the different wood-consuming industries and their relative importance. The bulletin concludes with lists of the different varieties of wood, classified according to the commodities into which they are manufactured, together with a classified directory of manufacturers.

The following table is a summary of the wood used in the Prairie provinces, by kinds of wood, showing the quantity, value, and origin:—

Kind of Wood	Per cent.	Quantity.	Value.	Average value.	Supply by Regions.				
					British Columbia.	United States.	East.	Prairie.	Foreign.
		M Ft. B.M	$	$ cts.	M Ft. B.M	M Ft. B.M	M Ft. B.M	M Ft. B.M	M Ft. B.M
Total	100·0	68,439	2,348,912	34 32	32,766	12,137	12,291	11,003	242
Douglas Fir	21·7	14,869	524,251	35 26	13,350	1,519			
Pine	20 3	13,923	406,756	29 21	5,551	1,902	6,470		
Spruce	17·8	12,165	190,760	15 68	2,644	477	1,184	7,860	
Cedar	15·2	10,422	337,001	32 34	10,422				
Poplar	8·6	5,885	136,741	23 24		108	2,647	3,130	
Oak	7·8	5,320	460,018	86 47		5,245	75		
Tamarack	2·6	1,770	41,288	23 33	434		1,323	13	
Birch	2·0	1,347	86,222	64 01	103	1,112	132		
Basswood	1·3	874	36,839	42 15		830	44		
Maple	0·5	374	20,585	55 04		71	303		
Elm	0·5	368	14,562	39 57		283	85		
Mahogany	0·3	228	34,521	151 41					228
Hemlock	0·3	175	4,960	28 34	156	19			
Ash	0·2	137	10,082	73 59		123	14		
Hickory	0·2	135	14,074	104 25		127	8		
Cottonwood	0·2	135	3,300	24 44	106	29			
Tulip	0·1	91	6,563	72 12		91			
Cherry	0·1	77	7,815	101 49		75	2		
Gum	0·1	70	4,113	58 76		70			
Cypress	*	22	1,450	65 91		22			
Walnut	*	18	2,729	151 61		16	2		
Hard Pine	*	10	612	61 20		10			
Spanish Cedar	*	9	1,712	190 22					9
Chestnut	*	6	451	75 16		6			
Circ. Walnut	*	4	800	200 00					4
Beech	*	3	255	85 00		1	2		
Sycamore	*	1	77	77 00		1			
Teak	*	1	375	375 00					1

*Less than one tenth of one per cent.

The wood of coniferous trees, commonly called soft wood, predominates among the material used in the Prairie Provinces to the extent of 79.3 per cent. of the total. Altogether twenty-eight different kinds of wood were reported and of these nine were softwoods and nineteen hardwoods. The first four woods on the list form 76.4 per cent. of the total and these are softwoods. Only three native woods are reported, namely, spruce, poplar, and tamarack.

Jack pine is sawn into lumber extensively in the region, but the greater part of it is used for rough construction and does not come under the scope of this investigation. The wood is usually sold mixed with white or red pine, and although in Canada many million feet are annually sawn into lumber, little or none of this is ever sold as jack pine.

Douglas fir is sawn into lumber in Alberta, but the product is sold with the imports from British Columbia. Birch and balsom fir are also sawn in this province, but only in small quantities for local use. In Manitoba, cedar, birch, scrub oak, balsam fir, elm, ash, and white and red pine, have been sawn but are not important commercially in the province.

The Prairie provinces form a convenient market for the forest products of British Columbia, as is demonstrated by the fact that almost half the imported material comes from that province. The United States provided 21.1 per cent., of which the greater part was oak and other hardwood. Ontario and Quebec provided an almost equal quantity, 21.4 per cent., of which over half was pine. Mahogany, Spanish cedar, Circassian walnut and teak were the only foreign woods used.

While the native grown woods in the Prairie Provinces include some species of the more valuable hardwoods such as oak, maple, birch, basswood, elm, and ash, these woods do not occur in commercial quantities and will always be imported for certain purposes. A better understanding of the qualities and uses of the native woods should lead to an increase in their utilization in a region where wood is not abundant and in many cases entirely absent.

Douglas Fir:—In 1913 Alberta mills reported cutting 291,000 feet of Douglas fir. The wood is used for building purposes almost entirely. While at first valued only for framing, the wood has gained popularity for more ornamental purposes, and is now used for all kinds of interior finish, flooring, panelling, and doors. It is used frequently as sliced veneer because of the striking grain and figure it exhibits when used in this way. Its use in the other industries is not extensive at present, although ten of them reported the wood in small quantities.

The wood of Douglas fir is very strong, tough and elastic, fairly hard and durable, usually straight-grained and comparatively light in weight. It is difficult to work on account of its extreme hardness when seasoned, splits too easily for many purposes such as box making, but can be obtained in large dimensions free from defect and is a favourite structural timber for bridges, culverts, cribwork, mining operations, and heavy framework of all kinds. It is used extensively in the round for piling and forms a large per cent. of the railway ties used in Western Canada.

Pine:—The pine used in the Prairie Provinces is made up of lumber of many different species. The wood cut in the province it-

self is chiefly jack pine (Pinus divaricata) with a mixture of white pine (Pinus strobus) and red pine (Pinus resinosa) in small quantities in eastern Manitoba, and lodgepole pine (Pinus Murrayana) in western Alberta. Most of this native pine is crowded out of the market by the importations from British Columbia and Ontario, but large quantities find a local use in the three provinces.

The greater part of the imports come from Ontario and Eastern Canada, and are chiefly white pine, with smaller quantities of red pine, and perhaps a little jack pine mixed in.

British Columbia supplies what is commonly known as bull pine (Pinus ponderosa) or western yellow pine. This is often sold as white pine or merely designated as "B. C. pine." It is not one of the white or soft pines, but belongs to the same class as the red or Norway pine of Eastern Canada. With this is imported a smaller quantity of western white pine (Pinus monticola) also called silver pine or mountain white pine. Its wood is similar to that of the eastern white pine, but the tree is not abundant in British Columbia compared to other commercial species, is not found in pure stands and is not marketed extensively. Some lodgepole pine is probably imported from eastern British Columbia.

The wood of the white pines, eastern and western, is very similar and is the most valuable. It is, above all, easy to work, being soft and straight-grained. When properly seasoned it is only slightly affected by changes in humidity and does not swell, shrink, warp or check immoderately. The lumber has a great diversity of uses, but is a favorite material for sash, doors, finish and house work generally from shingles to sills. It is light and strong and holds nails well, and is used for boxes and crating material on this account. Its uses in most cases depend on the ease with which it can be worked, in combination with its other qualities.

The two red pines, eastern red or Norway pine and western yellow or bull pine, are harder, stronger woods, more difficult to work and more resinous, but often more valuable for structural work and frame work. The bull pine is used as a substitute for white pine in its inferior uses. Red or Norway pine is used extensively for paving blocks, bridge work and railway ties.

Jack pine and lodgepole pine are the two inferior species. Their wood is weaker, more resinous, more liable to defect and of smaller available dimensions than the other species, and is used locally as a substitute for that of the more valuable pines.

Spruce:—There are five species of spruce native to Canada. One of these, red spruce (Picea rubra) is confined to the eastern provinces and is not used in the Prairie Provinces. Two others, white spruce (Picea canadensis) and black spruce (Picea mariana) are found all the way across Canada from the Atlantic Coast to the Yukon. Two others are distinctly western trees. Sitka spruce (Picea Sitchensis) is confined to the Pacific Coast and Engelmann spruce is found throughout British Columbia crossing the Rocky Mountains and coming down the eastern slopes into Alberta.

Of the wood used in the three Prairie Provinces over half is native grown, being chiefly white spruce with smaller quantities of black spruce and some Engelmann spruce from Alberta. The mills of the three provinces reported a cut of 219,071,000 board feet of spruce lumber in 1913, of which Saskatchewan contributed over half, Manitoba over a quarter, and Alberta the remainder.

The imported material comes from British Columbia, the United States and the eastern provinces. The lumber from British Columbia is mostly Engelmann spruce from the mountain hills in the eastern part of the province with some Sitka spruce from the coast.

The imports from the United States are from Washington, Oregon, and Montana, and are of the same two species. Ontario contributes white and black spruce only.

The wood of the different species does not differ to a great extent. Generally speaking it resembles pine, but is almost tasteless and non-resinous, lighter in colour, less durable, tougher, and of a finer grain.

The white spruce is the commonest tree and its lumber forms the greater part of the total production. Sitka spruce is the largest tree and produces the best class of clear lumber of large dimensions. Black spruce, as a rule, is confined to swamps and low damp situations. It consequently grows very slowly and seldom attains large dimensions, but it produces the strongest wood with the finest grain and texture.

Spruce is Canada's most important lumber, the tree is abundant over an enormous range and its lumber is rapidly taking the place of pine. It is the most important pulpwood in America, being valued on account of its long, tough, colourless fibres and comparative freedom from resin. Its toughness recommends it for boxes and crating material and in these provinces its use is largely confined to building construction and boxes. It is used by twelve industries.

Cedar:—There are two species of cedar native to Canada. Eastern or white cedar (Thuya occidentalis) is found growing from the Maritime Provinces to south-eastern Manitoba with a small isolated occurrence north of Lake Winnipegosis. The tree has an extensive local use and while it is used as lumber in Ontario and the East, the market in the Prairie Provinces is evidently supplied by importations of the western species (Thuya plicata) commonly called western red or British Columbia cedar.

Cedar is noted for its durability when exposed to moisture and in this respect it exceeds all other native coniferous woods. Like white pine it holds its place with little "working" even when exposed to alternate dryness and moisture. It is very easy to split and splits evenly because of its unusually straight grain. Western red cedar is the most important shingle wood in Canada at the present time.

In the Prairie Provinces the wood is used almost entirely for house building, being used extensively for the more popular priced doors, sash, and finish. Smaller quantities are used in eight other industries.

Poplar:—There are five species of poplar that reach tree size in the Prairie Provinces. Two of these only are of commercial importance, three being cottonwoods which do not occur in marketable quantities. The native poplars are, aspen (Populus tremuloides), and balsam poplar, or balm (Populus balsomifera) and are probably the most widely distributed trees in America, growing abundantly from the Atlantic to the Pacific. They are found northward almost to the limits of tree growth and extend farther out into the prairie country than most other trees. At present the wood of these two species is used mostly for fencing, outbuildings, and firewood. When sawn into lumber the wood is used for boxes and crating almost entirely, although some firms have reported its use for coffins and shells as well as for interior finish, furniture and fixtures.

Oak:—There are altogether twelve species of oak found in Canada, but of these only two or three are commercially important. White oak (Quercus alba) the most valuable and most commonly used species, grows only in the eastern provinces and in the United States. It probably forms the greater part of the oak lumber imported into the Prairie Provinces. Red oak (Quercus rubra) is more abundant, but not usually so highly valued. It is of rare occurrence in south-eastern Manitoba, but is abundant southward and eastward of this point. It is substituted for white oak in many cases. Burr oak (Quercus macrocarpa) is fairly common in southern Manitoba, but does not reach large size and is nowhere plentiful to form an important source of lumber supply.

The wood of the northern oak species may be roughly divided into two groups as regards their uses. The white oaks have hard, dense, heavy, tough, strong, durable wood. This has wide medullary rays which form the "flames" or "splashes" of hard, light-coloured wood exhibited on the surface of quarter-sawn material, which is fashionable at the present time for decorative work on this account. The wood of the red oaks is not quite so strong, tough, hard or heavy as that of the white oaks. It is not nearly so dense, possessing many large-sized pores or vessels running with the grain of the wood. These vessels are small and infrequent in the wood of the white oaks. The red oaks are usually less durable but the differences between the physical properties of the two groups are often disregarded and the wood of all species used indiscriminately. The medullary rays in the red oaks are usually narrower than in the white group and the quarter-cut material has a less striking figure. Over half the oak purchased in the Prairie Provinces is used for interior finish and hardwood flooring. It is used as lumber and frequently in the form of sawn veneer for doors, mantels and fixtures. Almost a quarter of the importations go into vehicle supplies where the wood is used for gear stock almost entirely. Office and house furniture take a fairly large proportion and the remainder is divided among five other industries.

Tamarack:—The common tamarack (Larix laricina) is almost as widely distributed as the spruces and poplars, extending westward from the Maritime Provinces to the Yukon and northward almost to the limits of tree growth. The tamarack cut in the Prairie Provinces and that brought in from Ontario is all of this species. The importations from British Columbia are of a different species, the western tamarack or western larch (Larix occidentalis) which is a larger tree than the eastern species, but which is used for similar purposes.

The tamarack is almost entirely confined to swampy wet situations and is nowhere very abundant. The wood is hard, tough, strong, elastic and durable and closely resembles that of Douglas fir and the hard pines from the Southern States. Tamarack is used in the round for mining timbers, poles and fencing and is highly prized because of its strength and durability. It is used for railroad ties wherever it can be obtained and is noted for its spike-holding qualities.

The wood purchased for use in the Prairie Provinces is used for paving blocks being treated with preservatives to increase its durability. It is also used for boxes, for crating heavy commodities, for house frames and flooring, and is used in small quantities by four other industries.

Birch:—There are at least four species of birch represented in the lumber used in the Prairie Provinces. None of these is native

except paper birch (Betula alba var. papyrifera) which does not occur in commercial quantities except in south-eastern Manitoba. The wood brought in from Ontario and the United States is mostly yellow birch (Betula lutea) and cherry birch (Betula lenta) with, perhaps, a small qauntity of paper birch. The British Columbia birch, the largest of the American species, is called western birch (Betula occidentalis).

Birch lumber is used in these provinces chiefly for flooring and interior finish, and for fixtures and furniture. The wood of paper birch is almost white in colour and while tough and compact it is soft, weak, and very perishable in moist situations. It is sometimes used for flooring. The wood of the other species in general is hard, heavy, and strong with a fine even grain and texture. It takes a high polish and lacking a pronounced figure it can be easily stained to imitate other cabinet woods. Its use is rapidly increasing for all kinds of interior finish and cabinet work, and for framework in vehicles, implements and boats.

Basswood:—There is only one commercially important basswood in America. The common basswood (Tilia americana) is found throughout the eastern and central United States, and in Canada in southern Ontario, Quebec, and the Maritime Provinces. It is not found in the Prairie Provinces in commercial quantities, although it occurs in river bottoms in southern Manitoba and Saskatchewan. The United States supplies over nine-tenths of the basswood used in these provinces, and Ontario the small remainder.

The wood is soft, tough, fine-grained and very easily worked. It holds its shape almost as well as any other wood in America and is preferred for panelling in vehicles and in cabinet work of all kinds. The toughness and lightness of the wood, together with its quality of taking paints and stains well, make it a favorite material for vehicle body work and box work in implements. Poplar lumber, when properly seasoned, can be substituted for basswood in many of its uses. Red gum (Liquidambar styraciflua) is a common substitute in the east and in the United States.

Maple:—The hard, or sugar, maple (Acer sacharrum) is the most valuable species in Ontario, where most of the maple used in these provinces is produced. The soft maples, red maple (Acer rubrum) and silver maple (Acer saccharinum) are neither so valuable technically nor so abundant as the first named species. The wood of the sugar maple is hard, tough, strong and above all very stiff. It is said to be liable to failure under sudden shock, but, if so, this fault does not detract from its popularity for frame work in vehicles and implements. The wood is almost universally used for heavy waggon axles. While the grain and figure are not particularly striking or beautiful (except the rare "bird's eye"), the wood is used extensively for furniture and interior finish. The wood is used altogether in nine industries.

The Manitoba maple (Acer Negundo) has wood entirely dissimilar to that of the other species, being creamy white in colour, soft, weak and perishable and of little or no commercial value at present. The tree is found throughout southern Manitoba and in river valleys as far west as eastern Saskatchewan.

Elm:—White elm (Ulmus americana) is the most abundant species on the lumber market. It is the only species of elm found as far west as southern Manitoba, but is only occasionally sown into lumber in that province. The greater part of the lumber comes from Ontario and the Middle West States.

The wood has a wide range of uses covering almost every wood-using industry. It is noted for its toughness combined with hardness and strength. It is remarkably difficult to split and hard to season without warping and twisting. Rock elm (Ulmus racemosa) is tougher, harder, stronger and more durable than any of the other elms, but is comparatively rare and restricted as to distribution. It is found in southern Ontario, but not in any of the western provinces. The other American species are not important as sources of lumber. Birch is taking its place for waggon hubs, although elm is still the favourite material for this purpose. The wood is used for outside work on heavy rough furniture and for frames of the more expensive kinds. It is used for implements, vehicle framework and boat timbers.

Hemlock:—The greater part of the hemlock lumber used in the Prairie Provinces comes from the Pacific Coast and is the wood of the western hemlock (Tsuga heterophylla). The eastern species (Tsuga canadensis) may form a part of the wood imported from the United States. Neither species is found in the Prairie Provinces.

Western hemlock is a valuable material with many valuable qualities and few of the faults of its eastern relative. The wood is light, rather hard, straight-grained, tasteless, tough and, usually, white in colour. Unlike the eastern species it is easy to work, and free from cup shakes and warping. It has a uniform structure, so that the summer wood and spring wood both stand up well to a cutting edge, and the wood can be worked more smoothly than that of the eastern species, in which the spring wood is soft and corky. Its durability and strength are not remarkable but for ease of working, a handsome grain and finish and lightness the wood has considerable value. It has long been misunderstood on account of the existing prejudice against the name hemlock which suggests the eastern tree. Lumbermen have attempted to overcome this difficulty by selling the wood under such names as Alaska pine, gray fir, Prince Albert fir, and others, and in some cases by mixing the lumber with that of Douglas fir and mountain spruce. Lately the policy has been to sell the wood under its own name, on its own merits, which will eventually bring it into popularity.

It is used at present for pulp, railway ties, poles, piles and bridge timbers, but usually as a substitute where other woods cannot be obtained as cheaply. It is well adapted for all kinds of house finish and framing, and is an excellent box and cooperage material. Edge-grain hemlock makes an excellent, smooth-wearing, floor, which will keep its place in dry situations.

It takes a high polish, is non-resinous, and shows a pleasing grain when carefully sawn. While not to be compared with oak, walnut, cherry or mahogany, it can be classed as a very useful cabinet wood.

Dollar Line may move to Vancouver

An announcement which will be of much interest to the lumber trade in British Columbia was recently made by Captain Robert Dollar to the effect that as a result of the Seamen's law passed at the last session of Congress the Robert Dollar Company is now planning to change the register of all its American ships and to move its San Francisco and Seattle offices to Vancouver, B.C. In a letter written by Captain Robert Dollar to Mr. J. F. Ives, manager of the Stimson Mill Company, Seattle, who has handled a large amount of the Robert Dollar Company's export business, Captain Dollar stated that he had just returned from Vancouver and looked over the terminal facilities there and found that he could make a very satisfactory arrangement with either the Great Northern Railway or the Canadian Pacific Railway, for terminal facilities. In fact, the proposition they had made to him "was all that could be desired." The only thing that was holding the company back from making the change was the extensive trade it had already developed from the Orient to California ports amounting to about 100,000 tons annually. The importance to Vancouver of such a move on the part of the Robert Dollar Company would be very considerable, but it will not be wise for British Columbia lumbermen to count too definitely upon this development being put into effect, until it has actually taken place.

A change has been made in the duty upon various articles imported into Newfoundland. Many articles which were formerly free of duty are now subject to a duty of 10 per cent. ad valorem and 10 per cent. surtax. Among these articles are the following:—Boards and planks of hardwood over eighteen feet in length, when imported for shipbuilding; mast pieces of pitch pine, Oregon pine, or similar hardwood; timber of hardwood when imported for shipbuilding; upon such certificates as may be required by the Minister of Finance and Customs,.

Dominion Mahogany and Veneer Report Good Business

The Dominion Mahogany and Veneer Company, of Montreal, importers of tropical woods, and manufacturers of all kinds of mahogany in lumber and veneers, report business conditions in high-grade woods as excellent and their mill running under normal conditions of trade. Mr. G. Kersley, the general manager, stated to a representative of the Canada Lumberman that the month of June was the biggest, in point of sales with them, since they started their factory.

Many lumbermen of the Pacific Coast of British Columbia will learn with regret of the destruction of the well-known four-masted barque Dumfriesshire, which has made frequent calls at British Columbia ports, to carry cargoes of lumber. The Dumfriesshire was torpedoed by a German submarine recently, on a voyage from San Francisco to Dublin, Ireland. The captain and all the officers and crew were saved.

Editor Canada Lumberman:— Vancouver, B. C.

I feel that I owe you an apology for not writing you before this, congratulating you upon your splendid achievement in producing the exceptionally well arranged compilation of facts and figures and useful information contained in the Export Number of the Canada Lumberman. I know that it will be appreciated by every one of your readers.

Yours very truly,

E. H. NEWTON.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Basswood Wanted

No. 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Wanted to Buy

One to ten million feet White Pine and Red Pine.

Also Lath. Will pay cash.

Box 219, Canada Lumberman, Toronto. 14

Wanted Lumber

Wanted for manufacturer three cars of 4/4 1s and 2s Soft Elm and three cars 6/4 1s and 2s Soft Elm, properly manufactured; shipment about 1st September. State cash price and point of shipment. Box 223, Canada Lumberman, Toronto. 14

Lumber Wanted

1½ in., 2 in., 3 in. Soft Elm.
1 in. and 1½ in. Beech.
2 in. Rock Elm.
2 in. Birch.
State lowest prices Mill.

Address Box 220, Canada Lumberman, Toronto. 14

For Sale–Lumber

For Sale

Ontario White Cedar Shingles for sale. Address Seymour Hawke, Millar Lake P. O., Ont. 14-15

For Sale

A few cars strictly 4 x 16 in. White Cedar Shingles.

J. AUSTIN & SONS,
14-17 Kinmount, Ont.

For Sale

Valuable bush, Hardwood; 16 miles from Toronto. Box 222, Canada Lumberman, Toronto. 14-17

For Sale

PILING, any length in Spruce, Red, White and Jack Pine or Hardwood.

Telegraph Poles, Ties and Fence Posts. Square Cedar and Hemlock up to 12 in. x 12. Correspondence solicited.

ANGUS PRENTICE & SON,
189 Arthur Street,
9-14 Toronto, Ontario.

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber. Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

40,000 ft. of 1 and 2 in. Maple, also a quantity of 1 and 2 in. Elm.

JOHN JOHNSTON,
14 Youngs Point, Ont.

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

For Sale
Ontario White Cedar Shingles 18 in.

2 cars XXXX.
4 cars Clear Butts.
4 cars XX or Sound Butts.
Full count, well manufactured, carefully graded. Prompt shipment.

C. M. WILLCOX,
14-15 Whitby, Ont.

FOR SALE
Norway and Jack Pine—Mill Run

1 x 4 5 x 10/16 ft.	850,000 ft.
1 x 6	410,000 ft.
1 x 8	67,000 ft.
1 x 10	14,000 ft.
2 x 4	158,000 ft.
2 x 6	161,480 ft.
2 x 8	306,222 ft.
2 x 10	144,537 ft.
2 x 12	26,849 ft.
Norway Pine Culls	
1 x 4 and up x 10/16 ft.	1,200,000 ft.

DEVON LUMBER CO.,
5t.f. Ottawa, Ont.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

Position Wanted

Band sawyer wants position. Single or double cut. Best of references. Used to fast rigs. Can come at once. Box 204, Canada Lumberman, 119 Board of Trade, Montreal. 11-14

Highest grade accountant, 20 years' experience in public works and lumber, now chief accountant in Ontario, wants change, Ontario or elsewhere. 40 years old, married. Highest references and securities. Box 210, Canada Lumberman, Toronto. 12-17

For Sale–Machinery

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.

1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3⅜-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Generator For Sale

C. G. E. make—203-35 K.W. With Base. Pulley and Rheostat. Never been used. Is absolutely new.

VICTORIA WHEEL WORKS,
13 Galt, Ont.

Woodworking Machinery For Sale

1—M. 80 Cowan Dowel Machine; 2—10-in. four side Moulders; 1—M. 190 Cowan hollow chisel mortiser; 2—26-in. revolving bed, double surface planers; 1—26-in. Whitney smoothing planer; 1—No. 802 Canada Machinery Corporation Shaper; 1—42-in. power-feed band rip saw; 1—40-in. McGregor Gourlay pedestal band saw; 1—32-in. Disc Sander with boring attachment; 1—20-in. American wood scraper; 3 Ideal Variety Saw Tables with boring attachments.

H. W. PETRIE LIMITED, Toronto.

Business Chances

Timber Limits For Sale

Can be quickly and profitably disposed of by advertising them on this page. This is where buyers of timber property look for opportunities to invest. If your "ad" is here the investor will see it. Canada Lumberman, Toronto, Ont. tf

Miscellaneous

Do You Want to Buy or Sell?

If you wish to purchase or dispose of a particular stock of lumber or logs, a mill property or timber limit, or some second-hand machinery, the CANADA LUMBERMAN AND WOODWORKER will bring quick returns. Use our "Wanted and For Sale Department."

Tenders for Pulpwood Limit

Tenders will be received by the undersigned up to and including Wednesday, the fifteenth day of September, 1915, for the right to cut pulpwood on a certain area situated north of the Transcontinental Railway, west of Lac Seul and south of English River in the District of Kenora.

Tenderers shall state the amount they are prepared to pay as bonus in addition to the Crown dues of 40c. per cord for spruce, and 20c. per cord for other pulpwoods, or such other rates as may from time to time be fixed by the Lieutenant-Governor in Council, for the right to operate a pulp mill and a paper mill on or near the area referred to.

Such tenderers shall be required to erect a mill or mills on or near the territory, and to manufacture the wood into paper in the Province of Ontario—the paper mill to be erected within such time and in such place as the Lieutenant-Governor in Council shall direct.

Parties making tender will be required to deposit with their tender a marked cheque payable to the Honourable the Treasurer of the Province of Ontario, for ten per cent. of the amount of their tender, to be forfeited in the event of their not entering into an agreement to carry out the conditions, etc.

The highest or any tender not necessarily accepted.

For particulars as to description of territory, capital to be invested, etc., apply to the undersigned.

N.B.—No unauthorized publication of this notice will be paid for.

G. H. FERGUSON,
Minister of Lands, Forests and Mines.
Toronto, June 5th, 1915. 12-17

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

For Rent

American Log Loader and operator for balance of the season. Very economical machine for loading or handling logs or timber. Trenton Cooperage Mills, Limited, Trenton, Ont. 14-15

For Sale

800 Gross Tons 56-lb. Rail.
1 40-ton Standard Gauge Locomotive.
1 15-ton Locomotive Crane.

W. FRASER,
14-15 83 Craig Street West, Montreal.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including:—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

British Columbia Scaling and Export Report for June

During the month of June the quantity of timber scaled in British Columbia amounted to 73,584,494 feet. B.M. of saw logs, 285,376 lineal feet of poles and piles, and 9,360 cords of railway ties, shingle bolts, fence posts, and cordwood. The quantity exported was as follows:—8,715,419 feet B.M. of saw logs, 145,860 lineal feet of poles and piles, and 38 cords of ties, bolts, posts and cordwood. Timber sales during the month of June amounted to 13,226,625 feet and 700 cords, valued at $11,979.41.

WASTE ELIMINATION
IN LOGGING OPERATIONS
My reports show where the waste is, and how it may be eliminated.
D. E. LAUDERBURN, Forest Engineer
1 Madison Ave., NEW YORK, N.Y.

J.M. & D.M. Croteau
Civil Engineers, Quebec Land Surveyors and Draughtsmen
81 St. Peter St., Quebec, Que.
Phone 2718
are prepared to examine and report on forest properties anywhere. Forest surveys, Logging maps, Timber estimates, Water Power, Water Storage, Topographical plans, Water supplies, Park Works, General plans for village sites and Private Estates. Railroad location and construction. Roads and Rivers improvements. Good information concerning Quebec Timber and Mining lands, cheerfully given.

Machinery and Equipment

What Manufacturers of Logging, Sawmill and Woodworking Appliances are Doing

A Motor-Driven Swing Cut-Off Saw

The growing popularity of the direct motor-driven tool with its great convenience, power economy, and safety has been recognized by The Berlin Works, of Hamilton, Ontario, in the addition to its line of a new motor-driven swing cut-off saw, an illustration of which appears herewith. One of the advantages of a motor-driven cut-off saw is that it can be installed in places not suited to the running of line shafts and belts, or in places remote from such a source of power. Among the special advantages claimed for the saw is the manner of pivoting the saw frame below the shaft of the motor rather than directly in line with it. This results in a tightening of the belt just as

Berlin Motor-Driven Swing Cut-off Saw.

the saw enters the cut, giving the saw increased cutting power at the point most needed. The heavy, diagonally braced, one-piece saw frame and the absence of all countershafting and side pull of belts keeps the saw free from the vibration usually found in saws driven from line shafts. Provision is made for adjustment of the saw vertically and horizontally and both saw and arbor pulley are equipped with safety guards.

A Canadian Blower & Forge Installation in England

A Canadian Blower & Forge Company Exhaust System has been installed at the British Insulated & Helsby Cables Company, Limited, Prescott, Lancashire, England. The fan used is a number 45 Canadian slow speed high efficiency mill exhauster with direct connected motor. There are 15 machines and six floor sweeps, and the system is operating very successfully, requiring 6 h.p. for the motor. The unusually good result is due as much to the design of the piping as to the high efficiency of the fan itself, which is operating at less than 3 ounces pressure, and with a uniform velocity in the pipes of less than 3,000 feet per minute. This low velocity is possible only when the frictional resistance is carefully estimated, so that the draft at every hood is the same. In fact, a sweep-up at the end of the exhaust pipe has just as good a suction as the hood nearest the fan. The discharge from the fan is carried outdoors approximately 100 feet to a Cyclone collector in the boiler house. The total length of the system is 280 feet.

A recent estimate stated that 60 per cent. of the camps of British Columbia were operating.

Many Awards for Disston Saws

Henry Disston & Sons, Inc., Philadelphia, Pa., are the proud winners of 12 first prizes awarded in 12 classes by the Panama-Pacific Exposition to the Disston Exhibit. The Disston firm exhibited in 12 classes of saws and tools, and were the winners in each case. This is a remarkable record, indicating that in not a single branch of their products were they excelled. Their exhibit is exceptionally unique consisting of a huge platform, the base of which is a horizontal circular saw, revolving slowly so that the exhibit erected upon it is continually moving before the eyes of the spectator. Upon the huge saw stand four immense keystones, on the surfaces of which are attached all kinds of saws. Above it all is a geographer's globe of leaded glass surmounted by an eagle. The globe revolves in the opposite direction to that of the rest of the exhibit.

A Valuable Veterinary Book Free

Fleming Bros., Chemists, of Toronto, manufacturers of Veterinary Remedies, whose advertisement will be found in another column, are offering to send free to any lumberman their Vest-Pocket Veterinary Adviser. This book contains 96 pages illustrated, is durably bound in leatherette and covers over two hundred veterinary subjects describing diseases of the horse so that their symptoms can be recognized, telling the nature and cause and what should be done to cure them. A copy of this valuable book should be found in every camp where horses are employed. Fleming Bros. have been established in business since 1897, and their Veterinary Remedies have become popular from coast to coast. Up-to-date laboratories where expert chemists are employed are maintained in Toronto, and a special mail order department takes care of all orders coming by mail.

Personal Paragraphs

Mr. Hugh McLean, of the Hugh McLean Lumber Company, Buffalo, N.Y., visited Toronto on business last week.

W. F. Cooke, president of the Northern Lumber & Mercantile Company, Fort George, B.C., will be a candidate for election to the British Columbia Legislature as a member for the new Fort George riding, as an independent. There are also a Liberal, a Conservative, and a Socialist running for the same seat.

Mr. W. A. Anstie, managing director of the Forest Mills of British Columbia has been nominated for the House of Commons in Kootenay, B.C. This is a move in the direction of a decision reached some time ago by lumbermen of British Columbia to endeavour to send practical representatives of their industry to Parliament.

Mr. F. E. Parker, who recently resigned the office of president of the Mershon, Eddy, Parker Company, a large lumber concern at Saginaw, Mich., has taken up his residence in Ottawa where he has become associated with W. C. Edwards & Company, Limited, taking an important part in the administration of the affairs of this company.

Mr. R. H. Campbell, Director of the Forestry branch of the Department of the Interior, is visiting Cape Breton. Mr. Campbell is looking into the timber resources of the province with a view to suggesting means for preserving and reproducing the forests of Nova Scotia. He has already been through portions of Guysboro and Pictou Counties, and will probably spend a few weeks more in the prosecution of his work.

Hardwood lumbermen in Canada will feel especially gratified by the recent action of the National Hardwood Lumber Association in selecting a Canadian as a member of their inspection committee. Mr. A. E. Clark, of Edward Clark & Son, Stair Building, Toronto, has for several years taken a very active and practical interest in the National Hardwood Lumber Association, attending its annual meetings and taking a keen interest in its affairs. He has now been selected as one of the Inspection Rules Committee, practically the most important committee of the Association. Incidentally we know that the N. H. L. A. is getting the services of an excellent man in Mr. Clark.

Editor Canada Lumberman: Bear River, N.S.

The Export Number of the Canada Lumberman is a most excellent publication and a splendid presentation of the present lumber situation with its allied subjects.

Yours truly,
Clarke Bros.

Editor Canada Lumberman:— Manchester, June 22nd.

I wish to congratulate you on the excellent export number you got out, quite the best I ever saw.

H. R. MacMILLAN,
Canadian Government Trade Commissioner.

Review of Current Trade Conditions

Ontario

It would take a man with more than normal imagination to report anything in the form of improvement in connection with the lumber trade in Ontario nowadays; yet even the calamity hunters would be hard put to prove to anyone that there is not much to be thankful for and not a little upon which to base a hopeful expectation as to the future. In the first place, summer trade is usually dull. In the second place, the excellent situation of the whole trade so far as production and stocks are concerned, has enabled them to meet the present abnormal situation firmly and patiently. There is today, much less sacrificing of stocks for the sake of picking up stray orders than one would have expected a few years ago if similar international conditions had developed. In the third place there are a few lines of trade which have been greatly stimulated by the dmand of Great Britain and her allies for war materials. As time passes it becomes more and more certain that an enormous movement of Canadian wood goods to Great Britain and France will develop. Already the movement is well under way, and each day shows a likelihood of expansion. In our last two issues we published detailed information regarding the requirements of the Canadian Government Shell Committee, for shell boxes. This business is already spreading its good effects through the trade and will be sure to increase as the Canadian output of shells increases. In the present issue we are able to present details of specifications for many kinds of boxes required in Great Britain. The reports sent by H. R. MacMillan from England give most encouraging accounts of the possibility of Canadians getting a large share of this trade.

The local trade throughout Ontario is hard to describe. It shows no changes in prices, or demand, practically the only important movement being dependent upon the trade with the farmers. Hardwoods continue fairly active and steady.

A slight falling off in the movement of lumber to the United States is reported from the Ottawa Valley, but it is not expected to be of long duration. Local trade at Ottawa is quiet and unchanged with prices unaltered. The mills on the Ottawa River are operating under fairly good conditions with a sufficient supply of water.

Eastern Canada

The trade situation at Montreal continues quiet for practically every description of lumber. The trade with New York is steady at unchanged prices, largely because so much less Canadian spruce was cut this year for United States points, most of it being manufactured for Great Britain. Building permits during June were fairly good totalling $1,015,315, a decrease of $928,281, as compared with June of last year. Dimension timber continues very quiet, Government contracts being scarce. Some improvement is reported in the tonnage situation as the grain traffic has lessened. Tramp steamers are now offering space for the first time this season. Lumber shipments to Great Britain are considerably larger, shipments of pine showing the chief increase.

Quietness prevails in the local lumber market at St. John, N.B., with prices steady. Building operations are light. Low grade stocks are about $2 per M. below last year's prices and available supplies are heavy. Merchantable spruce boards are also in large supply, and prices are from $2 to $3 lower than they were a year ago. Heavy shipments of deals from St. John have been made during the past month and the city mills are well shipped up. Freight rates continue firm. Lath are easier at about $2.70 per M. f.o.b. St. John, but stocks are light. The American market continues quiet. St. John harbour is very full of ocean sailing vessels. The latest steam charters were at 140s., and sailing charters at 130s. per Petrograd standard.

Eastern spruce dimension lumber is being maintained on a base quotation of $23 for Boston. There are strong indications of a curtailment of production before long. Recent reports from Eastern Canada, received at Boston, state that the fear that tonnage would not be obtainable for carrying spruce deals to England has not been so well grounded as was at first thought. This means that a large part of the Canadian crop of spruce will not be offered in the New England and the New York markets as was expected a short time ago. Random is easier at $21.50 as the top price for 2 x 4, and $20.50 for 2 x 3. There is a good demand for 2 x 8, but stocks are plentiful and the price is about $22. Arrivals of lath at Boston are plentiful and prices are a little easier, but the demand is improving. For 1⅝ in. the quotation is $4.10, but this is sometimes shaded to $4.05. For 1½ in. the range is now $3.65 to $3.70. The demand for shingles is rather uncertain. White cedars are quoted as follows:—Extras $3.25 to $3.40; Clears $2.75 to $2.90; Second Clears $2.40 to $2.60.

United States

In the United States, as in Canada, the general lumber market of the country bears a very striking resemblance to its predecessor of a few weeks ago. Any changes that are reported are entirely sectional, or of a very special nature. Reports received from many parts of the country do not indicate an increase in the volume of trade. There is however, some progress to report in a number of districts, and such price advances as have been made are being well maintained. Weakness of price is not a factor of importance at present. Stocks at mill points however, are extensive and are covering the demand so steadily that higher prices are not expected to develop at all quickly. A falling off in the demand is reported from the manufacturing States of the north and east. There is good evidence however, that conditions in these districts are sound. It is reported that the projected building throughout the country in the cities is as large as last year, with insistance upon immediate delivery of most orders for this purpose.

The movement of white pine is good, the demand being especially strong in the lower grades. The mills and yards of Wisconsin and Minnesota have been suffering from unfavorable weather. Improved weather is certain to result in increased consumption and movement from the mills. The hardwood field shows practically no change. There is a strong demand for such stocks as are approved by foreign Governments for gun stocks. A little improvement is reported in the demand for southern pine, particularly the North Carolina stocks, as the result of extensive factory building. In the Pennsylvania district for instance, a factory which is being erected for the production of war goods will require 8,000,000 feet of timber and heavy lumber. There has been a great deal of construction of this class already and more is certain if the war continues for any length of time. A great deal of interest centres in the export trade. The demands of the Governments of Great Britain, France, and Italy are large, but unfortunately cannot be extensively satisfied on account of the scarcity of tonnage.

Great Britain

The latest advices from Great Britain indicate that a brighter tone generally dominates the market. Conditions consequent upon the war have reached what may be considered a normal level, and importers are fairly well able to estimate in advance the details of any business which they wish to place. The consumption has continued astonishingly good, both for war purposes, and to a lesser extent for ordinary business. Packing case makers and wagon builders have been excessively active on orders which have had to be executed on record time, and in connection with which the cost has been quite a secondary consideration. Some time ago it was expected that at about the present date, when shipments from the Baltic would be arriving, a weakness in spot values would develop. Up to the present there has been no sign of any such change. In fact, prices are, if anything, still on the up grade.

At London little change is reported in the spot market. The consumption is well maintained and would be greater if more stock were available. Arrivals however, are affected by the high rates of freights, and are comparatively light. Values remain steady, with a tendency to hardening, which seems likely to become more pronounced as the season progresses. At Churchill & Sim's recent auction sale, 3 x 11 third Montreal pine brought £19, and fourth ditto £17 10. Unsorted 3 x 9 red pine sold for £17 5s. St. John spruce 2 x 6 brought £15.

At Liverpool, reports indicate improved trade, as a result of more rapid despatch of timber, deals, boards, and other wood products to the up-country districts. There is still however, serious congestion at the docks, an interesting fact in view of the notoriety which has been given to Liverpool by the efforts of German submarines to interfere with its ocean trade. No change is reported in the spruce deal market for cargoes "to arrive." Freights, which continue to be the most important part of importation, are still very strong. This, together with the high cost of insurance and covering rates for war contingencies is the chief factor in the indisposition of the usual importers of Canadian goods to make contracts for the future. Importations of pine goods from Montreal are on a moderate scale, but they are going into consumption as fast as the railways can take them up country. A good-sized Government request for high-class pine boards recently took all from the Liverpool market that would meet with the stringent requirements involved. Canadian birch is in strong demand both in logs and in planks and meets with a ready market before it is landed.

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Trade Marking Time

St. John, N.B., July 7th (Special to the Canada Lumberman): The lumber trade locally is marking time. No change can be reported in sales or prices. No new work has come along, and what little building is going on is of houses of a very limited size, and the quality of lumber being used is largely low grade. In reality they are mostly small summer houses or parts of proposed houses upon which the builders expect to enlarge when times improve financially and otherwise. Of course, there are some good dwellings being erected, but largely the buildings are as above stated. Factories and yards are pushing each other for business, and prices in many cases are being shaved. Naturally each plant and yard wants to keep its staff and organization together, and it is better to break even than to lose trade customers or close up shop.

Refuse or low grade stocks are about $2 per M. less in price than last year. The market is over stocked and demand both locally and for shipment is very limited should the mills run through the full season yards will be all over-supplied. Merchantable spruce boards, both rough and planed or matched, are a drug upon the market, and prices are being lowered from $2 to $3 per M. under last season's prices. If people have the money to build, it seems that this is the year to do it in, as labor and material are very much lower and easier to be had than for years. St. John will and does need many more dwelling houses in the suburbs, and the demand is ever on the increase. Shipments of deals from St. John have been pretty heavy during this month, large quantities being shipped by W. M. Mackay and by J. E. Moore. Stocks of city cut deals are not excessive as the mills are well shipped up. A good deal of country stock has been coming in and is being shipped forward as fast as tonnage can be provided. It is said by the dealers that prices for deals have receded, but how much is hard to tell. Stocks at the first of the month in Great Britain were very light, the greatest trouble being the congestion on the docks where the ships are landing goods, all on account of scarcity of labor. If help could be found to forward the deals no doubt the demand would be found to take them up.

Freight rates remain firm at 137s. 6d. for usual cargoes. No prices can be made for deals at St. John, although it was said that some sales took place last week at $15 which is $4 per M. below the spring and winter prices.

Laths are falling and are selling at about $2.70 per M. f.o.b. St. John, but stocks are light and prices will not recede to any extent.

No improvement is shown in the American market. Every buyer seems to be awaiting the answer to the question whether Germany and the United States will go to war.

Financially, things are pretty sound in this section of the country. The banks are over-stocked with money; but are not loaning very freely.

St. John Harbour Full of Vessels

St. John, N.B., July 7th:—Not for many years has there been such a showing of ocean sailing craft in this harbour as there is at present. Ships, barks, schooners of varying size, line the wharves or ride at anchor in the stream. There are a few steamers, but the more striking-looking "wind-jammers," with their forests of masts and yards, are the most conspicuous. Freights are a little easy just now, deals having dropped a pound a standard in the British market. While chartering has been quiet for ten days or more, there has been little reduction in rates; the latest steam charters having been 140s., and in sailing craft, 130s. The presence of so many ships in the harbour in July has served to stimulate general business, while at the same time solving the unemployment problem. Harbor development work is not being pushed at the present time with very much vigor, but it is hoped that conditions will improve in this respect before fall. The city's harbour revenue for the first six months of this year shows an increase of $15,281.04 over the same period last year. The totals for the six months of 1915 are $72,499.78; for 1914, $56,678.74.

Barbados Market Report

S. P. Musson, Son & Company, Barbados, report under date of June 11th, as follows: Lumberstuffs.—White pine—There have been no arrivals during the fortnight, but we understand two cargoes have been sold to arrive at $35 duty paid for Merchantable, $28 Second quality, and $25 for Inferior. Merchantable is in full stock, but Second quality White pine is wanted. Spruce—Market is fully stocked and there is no enquiry. Shingles—Dealers are fully supplied, and demand is very dull, but the Schr. "Ainslie" is known to be on the way from Gaspe coast, with an assorted cargo. Shooks and wood hoops—No arrivals of either.

Ottawa Trade Quiet—The Eastern Freight Rates Case

Ottawa, July 5 (Special to the Canada Lumberman): There has been a slight falling off in the movement to the United States from the Ottawa Valley, but it is expected that things will pick up again before long. Locally there is little business and the prospects are not very encouraging. Prices remain the same as they have been for a long time past and are not likely to alter for a long time to come. Operations in the mills and on the river are proceeding under fairly good conditions as there is ample water to meet all requirements.

The subject of most concern to lumbermen here, as no doubt to those throughout Eastern Canada, is the Eastern Freight Rates case. It is now before the Railway Commission for a decision. If the railways are allowed to increase their rates on lumber it will be a serious blow to business, which is in a bad enough state just now. Another vigorous protest against the request of the railways was made at the concluding sitting for the taking of evidence in the case, on June 30th, by Mr. J. R. Booth and Senator W. C. Edwards. They spoke in behalf of the lumbermen of the district. Those who accompanied Mr. Booth and Mr. Edwards were: Ward C. Hughson, of Gilmour and Hughson, Hull; Dan McLachlin, of McLachlin Bros., Arnprior; Sir Henry Egan, of the Hawkesbury Lumber Company; A. E. Eastcott, Pembroke Lumber Company; J. B. Allen, Robert Cox and Company, Ottawa; E. R. Bremner, Watson and Todd, Ottawa; E. G. Macfarlane, E. B. Eddy Company, Hull, and Frank Hawkins, secretary of the Canadian Lumbermen's Association.

A spectacular fire, which broke out in some dressed lumber piles at the plant of the E. B. Eddy Company, Hull, last week did over $3,000 damage before it was put out. The loss was covered by insurance. As an appreciation of the good work done by the Hull fire brigade, the E. B. Eddy Company sent a cheque for $25 to the firemen's benefit fund the next day.

Five river drivers employed by the W. C. Edwards Lumber Company, were drowned in trying to shoot the La Maine rapids on the Lepine River last week. The men had got some distance through the rapids when their boat capsized and they were sucked down in the strong current. They were all experienced river men, but perished before help could reach them.

Twenty-five per cent. off the 50 per cent. surtax on the fire insurance rates that was put on business properties, lumber piles, and saw mills in Ottawa last November by the Canadian Fire Underwriters' Association, has been taken off all buildings and property except lumber and saw mills. The surtax was put on owing to the poor water pressure, but, as several improvements have been made lately, the 25 per cent. reduction is allowed, and the balance will be taken off when the overland pipe is completed, which will probably be next spring. No explanation is given as to why the lumbermen do not benefit, but the official notice from the underwriters states that a special rate will be granted to them shortly.

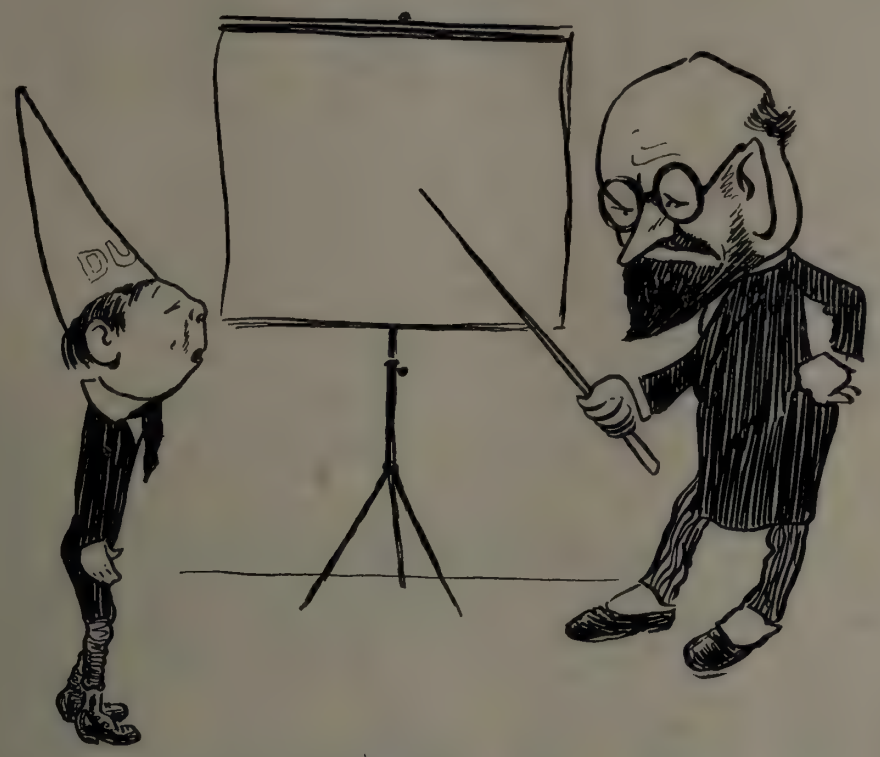
Tonnage More Plentiful at Montreal

Montreal, July 9th (Special to the Canada Lumberman): There is little or no improvement in the situation to report. Enquiries indicate a very quiet demand for almost every description of lumber. An occasional wholesaler reports that his turnover is above that of the corresponding period last year. Business however, is more difficult to secure, and firms who two years ago obtained many mail orders have now to drum them up. It is satisfactory to note that the trade with New York is of a steady character, and that prices are maintained. One reason for this is that considerably less Canadian spruce is being offered in New York, many mills which formerly cut for that market having this year manufactured for Great Britain.

Last month's local building permits were, considering conditions, as good as could be expected. They totalled $1,015,315, a decrease of $928,281 as compared with June of last year. For the six months the total was $3,410,313, a falling off of $4,911,594.

The dimension timber section is very dull, due to the paucity of Government contracts.

Owing to the small quantity of freight offering, rates by canal barges to New York from the Ottawa Valley and Three Rivers and Quebec have ruled low. They have been $2.50 per 1,000 feet for the former, and $2.25 for the two latter points. The transportation com-



A HARD LESSON

For many people to learn is how to buy right, that is to obtain the greatest value for every dollar expended. This is more true of lumber than most commodities.

Price does not establish Value. You know from experience that some of the most expensive material you have ever bought was purchased at the cheapest price.

Our business has been built up on a "value" basis. We aim to give the fullest possible value for each and every one of your dollars.

THAT ORDER PLACED WITH US INSURES

Prompt, Courteous and Efficient Service.
The choicest lumber, best grades and smoothest mill work.
Your most critical customers pleased.
Satisfaction from start to finish, and the mental relief that this assures.

If your business needs a Spring Tonic, try a car of Fenderson Spruce, New Brunswick Shingles, and Lath,—if your trade is not as good as you'd like,—try the "Quality Policy" as a stimulator. One of the best advertising mediums you can employ.

Make that next car a Fenderson Car. You'll like it.

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Sayabec, Que. **Cedar Hall, Que.**
Salmon Lake, Que. **St. Moise, Que.**
Jacquet River, N. B.

WE CARRY THE LARGEST AND BEST ASSORTMENT OF DRY SPRUCE IN CANADA

panies are now asking for an advance of 25c per 1,000 feet from all points.

Consequent upon the decrease in the grain traffic, a larger amount of tonnage is available for lumber exports, with a consequent improvement in the situation. Agents for tramp steamers are now offering space for the first time this season. Rates continue high, although if there continues to be a scarcity of grain, it is probably that rates will drop. A tramp has been chartered by Watson and Todd, Limited. Lumber is being shipped in larger quantities, with an increased amount of pine going to the other side.

Although the ground wood market is quiet, prospects are that a little more activity will be shown in the immediate future. Sulphite is strong with a tendency to higher quotations, owing to the restricted arrivals from Europe in the United States. Advices from England state that easy bleaching has risen about $2.25, and strong $1.25. The news print market is slightly better, but the mils are not working to full capacity.

During the month of June 6,359 cords of pulpwood passed up the Lachine Canal to Canadian ports, and 30,441 cords to American ports.

Alderman W. K. Grafftey, of the Montreal Lumber Company, has been appointed acting mayor of Westmount for three months.

The St. Lawrence Pulp & Lumber Corporation, Chandler, P.Q., have contracted for a very large output of their sulphite, and the mill is now in operation turning out the pulp.

Normal Conditions on the North Shore

Thessalon, Ontario:—The general condition of the lumber business in this section of the country is normal—nearly everything sold that is in shipping condition—and more being made. The Hope Lumber Company have the "Old Saginaw Plant" nearly ready for operation "spick and span" from basement to garret with the latest improvements for modern lumber making and everything right in line. The Hope Lumber Company will undoubtedly have one of the best mills in Ontario.

The Spanish Mills Company are rebuilding the mill at Cutler.

The C. Beck Manufacturing Company sent forth their first boom of logs to Penetang during the third week in June. The "barque Chamberlain," towing for them.

The Rock Lake dam went out recently. This may cut a big figure with the Beck Manufacturing Company's business for the season—it was built in 1914.

The Edward Hines Lumber Company, of Chicago, the Stearns Sault and Lumber Company, of Luddington, Mich., the Seaman Kent Company, Limited, Meaford, Ont., and the Casey-Shaw Company, Limited, of Sudbury, are among the buyers in this section, this season.

The Thessalon Lumber Company's mill at Nesterville is in full operation. The little mills in the hardwood line have their cuts cut.

Eddy & Glinn are having their cut of pine manufactured at Soo, Ont.

A. McPherson, of Longford Mills, is having his drive from the Echo, manufactured at Nesterville. He also had a small cut at Day Mills.—F. C. Hall.

Quebec Cullers' Report

The following comparative statement of timber, measured and culled, is furnished by the Supervisor of Cullers, Quebec, P.Q., under date of July 7th:—

	1913. Cubic Feet	1914. Cubic Feet	1915. Cubic Feet
Waney White Pine ...	121,400	384,240	139,240
White Pine	40	.....	.....
Red Pine	680	.....	.....
Oak	47,680	184,320	78,160
Elm	163,920	253,200	46,840
Ash	840	600	480
Birch and Maple	47,680	50,800	42,240

The Pacific Logging Congress and the Forest Industry Conference under the auspices of the Western Forestry & Conservation Association will be held at San Francisco, on October 19-21. The first day will be devoted to forest fire matters, the second to broad questions of vital importance to-day to the lumber industry as a whole, and he third day to logging in particular. Following this the Logging Congress will have its usual trip in the woods, this year to the Redwoods camps.

A report from Vancouver, B.C., under recent date, states that many millions of shingles are now being shipped from Vancouver to San Francisco, for trans-shipment to Eastern United States by way of the Panama Canal.

Imports of Softwood into China

The imports of softwood timber into China from 1905 to 1913, according to a report published in the June 21st issue of the Weekly Bulletin of the Department of Trade and Commerce, was as follows:—

1905	sq. ft.	90,635,262
1906	sq. ft.	170,247,345
1907	sq. ft.	220,898,917
1908	sq. ft.	131,766,711
1909	sq. ft.	95,849,574
1910	sq. ft.	137,989.857
1911	sq, ft.	98,407,445
1912	sq. ft.	78,912,408
1913	sq. ft.	161,375,117

According to the same report the imports from Canada from 1905 to 1912, 1913 figures not being yet available, were as follows:—

1905	sq. ft.	51,747
1906	sq. ft.	.....
1907	sq. ft.	3,392,162
1908	sq. ft.	1,710,873
1909	sq. ft.	50,926
1910	sq. ft.	.....
1911	sq. ft.	18,000
1912	sq. ft.	5,000
1913	sq. ft.	.....

The United States and Japan are the greatest sources of softwood timber supply for China, the quantities coming from any other countries, with the exception of Russia, being negligible. In the above table it will be noted that the imports for 1906 and 1907 were unusually large. This was due to the heavy imports of railway sleepers, particularly from Japan.

Birch Deals Required

A market exists in England for wood dowels, which are used principally by chair makers, and also in the cabinet-making trade, says Claude Dyer, acting Trade Commissioner at Leeds, England. The dowels should be made from birch, thoroughly seasoned and dried, and are required in diameters of one-eighth inch, one-quarter inch, five-sixteenths inch, three-eighths inch, seven-sixteenths inch, one-half inch, five eighths inch, three-quarter inch, and one inch. The lengths vary from three feet in the case of the smaller diameters up to four feet in the larger sizes.

For shipment, the dowels should be packed in bundles of 500, 200, or 100, according to their diameters. Canadian firms able to offer supplies for export are invited to quote their lowest competitive prices covering delivery to north of England ports.

An action has been commenced before Mr. Justice Morrison at Victoria, B.C., by the Alberta Lumber Company, Calgary, Alta., against B. A. & C. B. Lewis, of Vancouver and Seattle for the return of money paid and the recision of a contract to purchase lumber at Howe Sound. The plaintiffs claim that the limits did not contain the amount of lumber that was represented. They allege that the defendants represented the amount of timber to be 160,000,000 feet, and in any event not less than 125,000,000 feet, and that the defendants now agree that the amount is 40,000,000 feet. The plaintiffs however allege that the limits do not contain more than 15,000,000 feet. The plaintiffs further maintain that their representative was taken, by mistake on the part of those guiding him, to the wrong timber when making an inspection previous to the purchase, and that he did not see the timber which he afterwards found that he had bought.

Put Your Fires Out

A practical form of publicity directed towards the prevention of forest fires has been adopted by the Ontario Department of Lands, Forests and Mines. A handy pocket whetstone neatly mounted in enamelled metal is being sent out to all kinds of people who are likely to spend any of their time in the woods, including lumbermen, loggers, tourists, settlers, railroad construction gangs, boy scouts, etc. On the enamel back of the whetstone the following is printed in large type:—"Prevent Forest Fires—When in the woods put your camp fires out—do not drop lighted matches or tobacco." This method of bringing the importance of preventing forest fires has been adopted by other interested Governments in Canada and the United States and has proved very effective.

Shipping at West Bay, Parrsboro, N.S., is reported to be very active this summer. At the date of a recent report there were four or five vessels in the harbour taking on deal for the European market, and a number had already been loaded and sailed for Great Britain. The prospects for a steady summer's work were excellent. Among the heaviest lumber shippers are B. L. Tucker, J. Newton Pugsley, of Parrsboro, and John E. Moore, of St. John, N.B.

TEAS!

There is an interesting condition of the tea market at present. You who have been using black teas for the Camps might perhaps find it to your advantage to consider changing over to Mixed or better still from an economical standpoint straight Greens. The latter will stand more hard usage in the making and serving than either of the others and the price is much lower.

We are specializing in a line of Greens at 17½ Cents

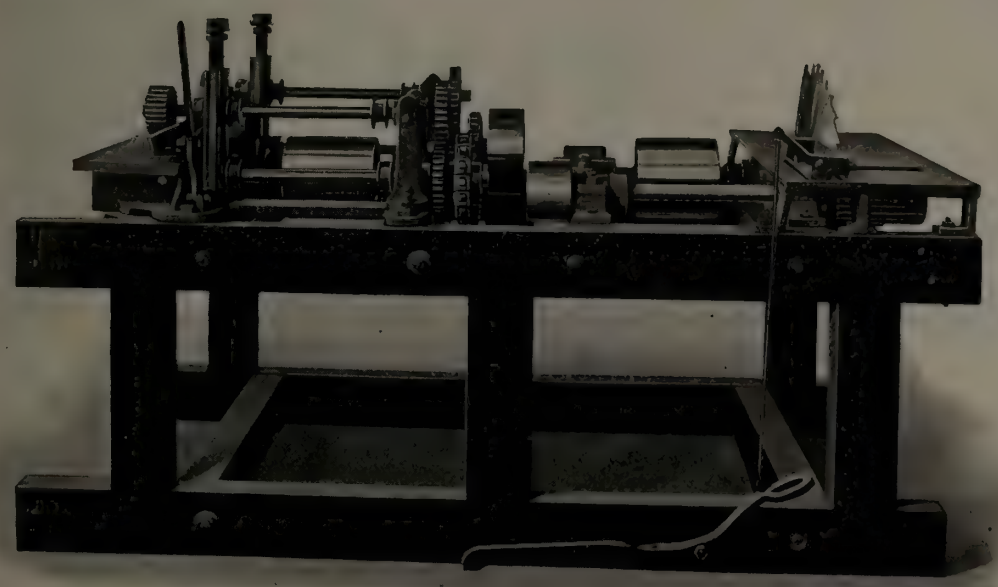
which we know will give extra good satisfaction. Ask for a sample.

H. P. ECKARDT & CO.

WHOLESALE GROCERS

Church St. & Esplanade, TORONTO

McLennan's Lath Mill and Bolter



THE capacity of this machine is 45,000. The other specifications are, lath machine pulley 7 inches diameter by 9 inches face, bolter pulley 18 inches diameter by 9 inches face. Floor space 7 feet 6 inches by 3 feet 6 inches.

This lath mill and bolter is substantially but inexpensively constructed and will manufacture into profitable material, lumber that might otherwise be unmerchantable.

We also make gang edgers, shingle machines, lath machines, bolters, sleeper machines and barkers, etc.

Write us for particulars.

McLennan Foundry & Machine Works Limited

CAMPBELLTON, N.B.

Efficiency in the Logging Camp

By J. T. Bussey*

The subjects that I am going to discuss are collected from my own ideas, and those of other men who are interested in the logging industry. I speak of the logging industry because it is the work that I am most familiar with, and have spent the biggest part of my life in.

Increasing labor efficiency has been a question, and a big one, with every wide-awake manager and superintendent of any kind of a plant or operation for the past few years, and should have been a particularly interesting subject to those engaged in the lumbering and logging business and its allied interests during the past few years, when the chance of making a profit depended on the most careful management.

The first thing we thought of was to improve our equipment, get better engines, better blocks, better cable, and all the old machinery has been sent to the scrap pile, where, practically speaking, it is thrown away; whenever we sell an old piece of machinery it costs all we get for it to load it aboard the cars; and these old machines as a rule do as much work when we discard them as they did when new, but the times have outgrown them and should we hang on to such equipment it would be only a matter of time until we would go broke. While we have improved our equipment and methods, we must ask ourselves, have we given the "human element" in our operations the proper amount of attention, or have we just let this take care of itself, figuring that dissatisfied and unsatisfactory labor was all we could expect to get, and so the only thing to do was to do the best we could with what we had, and call that good enough?

It has not only been restless and unsatisfactory labor, but in a great many cases overpaid labor, considering the efficiency we have been getting out of it.

Labor the Principal Cost of Production

Our cost information advises us that 84 per cent. of our total cost of production is paid to labor and 16 per cent. for repairs and supplies, depreciation and overhead expenses; and we have gone ahead and let the big expense get away from us, and devoted the greater part of our attention to improving machinery and methods, which only represent 16 per cent. of our cost, and let the 84 per cent. rest by the wayside, when both should have received attention in the proportion that one bears to the other.

Unsatisfactory machinery and methods will not get us logs any more than dissatisfied labor will. Satisfied labor and proper equipment go hand in hand and are inseparable.

The good lumberjack (with the accent on the good) is a type by himself. In my experience handling all kinds of labor, I consider the Western woodsman the finest type of laborer I have ever known. Generous to a degree, fearless, loyal to the company and interested in his work if properly treated. But I have found, and I think you have all found the same condition to exist, there are not enough good loggers to go round, so this condition compels us to draw on some other source of supply. This condition no doubt exists with most all other branches of the industry.

Why not conduct our business in such a way that we will attract the higher class of labor instead of the scum? Why not attract men with brains and ambition instead of those who lack both, and only work because they are compelled to, and only go to work in the morning because they are driven and work under the driver's lash all day, and their greatest longing and desire is either to see six o'clock come, or hold on until they get a road stake. I think our efforts and aim should be to fill our works full of ambitious men, whose ambitions and determinations are to hold our position some day, and I can say without fear of contradiction that the sooner our organizations are filled up with this type of men, the sooner we will be able to retire and give some of them a show to fill our positions.

Community Interest the Ideal Organization

The ideal labor organization is the organization where both the employer and employee are the members, and where their interests are and should be mutual. It is of importance and interest to the employee to see that his employer makes money ,and it is a certainty that the employer can not pay good wages and supply proper and safe equipment unless every employee makes some money for the employer. In other words, the proper relation between the employer and employee should be standard pay for standard output, which standards should give the owners the profit they are entitled to, and beyond this standard point, then the excess profit should be divided between the two, the employer and the employee, in relation to what they are giving the business, or more concisely, "Standard wages for standard work, plus additional pay for additional effort."

As we have no systems of this kind here, I am not able to vouch for the success of such a system as applied to our work here. However, I am very much interested in such a movement, and I believe I shall try to install a system of this kind soon, providing it will meet the approval of my superior. I believe a system can be drawn up to suit our conditions and can be made profitable to the company and to the men. There are a great many different premium and bonus systems throughout the country, and most all of them seem to work successfully in their locality, and no doubt we could adopt a bonus system similar to that of other concerns, making a few changes if necessary to meet our conditions, or figure out a system of our own. In any merit or bonus system that may be adopted, the employer, being the most powerful and the dictator as to what the system shall be, must bear in mind that fair play must be practised at all times. Sharp practise will bring about the reverse result of what you expect.

Suggestions Appreciated

Any suggestion that will increase our output that any member of the crews has to offer, either to the foreman or myself, should be given due consideration, and should be installed and tried out, if we think it meritorious. Our interests are mutual, so let us get together. I have accomplished some wonderful results with this system. I will state here, gentlemen, that I have learned more about this logging business from the men in the woods on our own ground and with our own conditions than through any other source of learning I ever had in the business that I follow. Among the many men that we employ we can get most all kinds of information that we may want concerning the work by simply conversing with the men. I do not mean that we should adopt everything that we are informed of, but all that we hear pertaining to new systems and increasing our output should be taken into consideration; sometimes we add a trifling thing to our system that saves dollars in the course of a year, without costing a cent to install.

Waste of any description, to me, is wicked, whether it be natural resources, supplies or human effort. Beyond all question the greatest waste in the world to-day is misapplied, misdirected or useless human effort. It does no one any good, neither the employer whose net income is reduced, nor the employee whose chance of increasing his earning capacity are small. To my mind the key to all schemes for bettering our labor situation is to install some system whereby you arouse the ambition of our employees, either to make more money and save it, or climb up in the world to a position of responsibility and authority.

Piece Work System

I believe piece work is the only system where it can be applied, for with this system the employer pays only for work that is done, the only risk he has is in regard to the quality of the workmanship applied to the work, but that applies to day work as well, and also the bonus system. Those troubles, however, have been greatly overcome, by careful supervision.

It does not matter what system you install, whenever there is labor connected with the work it will keep you fighting for quality. I do not know why, but such seems to be the case. Of course, the faster we work the easier it is to make mistakes; therefore, while we are teaching speed we must also teach quality. It all reverts back to the management; management is the whole thing. We may take the best men in the world, and if we do not lay the work out for them properly, and they are unable to produce anything like a fair day's work, they will become disgusted and leave, even though their pay is satisfactory.

My experience has been in handling working men of all classes that the majority of lumberjacks will treat any honors conferred on them for producing a large amount of work pretty much as a "bull;" in fact, any man producing a much larger amount of work than the others for the same money is often called a sucker, and the balance of the crew will make life almost unbearable for him.

The only way I have ever been able to confer honors on a working man was by paying him more money for his good work. At the same time it always pays to give a great deal of attention to the men in general and be able to show our approval of the good that they do.

My idea is that this subject can be better applied in a broader way with men of higher standing in life, where men are not so much in need of a dollar. We will take, for instance, a good surgeon who is successful and gains the good-will of his community and they confer honors on him for some great work that he has done, he will greatly appreciate it, and at the same time it is an asset to his practice.

This system is also much practised in schools and colleges among the students to create more ambition, but an ordinary working man looks at it from a different angle.

Great Britain's imports of wood for the month of May, 1915, amounted to 521,987 loads as compared with 608,937 during May, 1914. This was a decrease of 14.2 per cent. The value of these imports however, increased, the total for May being £1,739,240, as compared with £1,651,663, an increase of 5.3 per cent.

*Address delivered at a meeting of the Mutual Improvement Association, McCloud, Cal.

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EDGINGS

Ontario

R. E. Book, Smithville, Ont., recently lost his sawmill by fire. The loss is estimated at $5,000, which is partly covered by insurance.

The sawmill belonging to A. E. Clingen, Martintown, Ont., was recently destroyed by fire. The loss amounted to $7,000. There was some insurance.

Thos. Roussel & Son, Nightingale Street, Hamilton, Ont., recently lost their planing mill by fire. The loss, which was mostly machinery, amounted to $9,000.

Chew Bros. mill, Midland, Ont., which was shut down recently for a few weeks, is again in operation and is expected to run twelve hours a day for the balance of the season.

The Monteith Pulp & Timber Company, Limited, has been incorporated with capital stock of $40,000, and headquarters at Toronto. The company is empowered to manufacture and deal in logs, timber and pulpwood. Among those interested are Edward R. Heyland, Toronto, and J. Thompson, Havelock.

The Canadian Paper Sales Company, Limited, has secured a Dominion charter to buy, sell and deal in pulpwood; wood pulp, lumber, ties, laths and shingles, with head office at Toronto, Ont., and capital stock of $100,000. Those interested include F. H. Anson, V. E. Mitchell, C. M. Holt, E. M. McDougall and P. F. Casgrain, all of Montreal.

The Hope Lumber Company, Thessalon, Ont., commenced operations at the "Saginaw" plant on June 29th. The mill has been thoroughly overhauled and a large amount of the most modern equipment has been installed. One hundred men found employment, and a total of 200 men were to be employed when the balance of the equipment had been completed, which was expected to be in the course of a few days. The company have sufficient logs for this year's cut and are looking forward to a very busy season. Extensive tramways are under construction and trucks and cars are being built to handle the large output of the plant.

The Abitibi Pulp & Paper Company, Limited, which commenced manufacturing pulp at its plant at Iroquois Falls about a year ago has now commenced to turn out paper. Two machines have been installed and shipments have already been made of the finished stock. A third machine is nearing completion. The fourth and last machine is under way and will be utilized later. The mills have a production of 225 tons of news print paper per day. The ground wood mill turns out 210 tons daily, and the sulphite mill 60 tons daily. It is stated that the company has arranged markets for its output for some time ahead.

Eastern Canada

C. Redden, Kentville, N.S., recently lost his sawmill by fire.

H. Boulay, M. P. for Rimouski, recently lost his sawmill at Richard's, N. B., by fire.

The sawmill belonging to Mr. Holesworth at South Bolton, P.Q., was recently destroyed by fire.

Mr. E. Sherwoods will put in a sawmill at Mill Brook on the Wescott property at the head of Lake Utopia, N. B., late this summer. Mr. Sherwood acquired this property some years ago.

The International Mills, Limited, Rawdon, Que., manufacturers of rough and dressed lumber and excelsior, have opened offices in the Coristine Building, Montreal. Mr. R. H. Miner is the managing director.

Most of the machinery of the New Brunswick Pulp & Paper Mill, Millerton, N. B., recently destroyed by fire, has been sold to junk dealers, who are breaking it up and removing it. The digesters and some other parts of the plant have been retained and there is talk of rebuilding the mill.

Sealed tenders are being received by J. W. Richardson, Fredericton, N. B., up to July 24th for 400 acres of timberland situated on the Magagnadavic River, about a quarter of a mile from the "Shore Line Railway," near Bonny River, Charlotte County, N. B. The timber was formerly part of the Gilmour Estate.

A. G. McIntyre, manager of the Pulp & Paper Mills of the Bathurst Lumber Company, Bathurst, N.B., who was recently in Toronto on business, stated that the new sulphite plant of the company which will make bleached Mitscherlich sulphite pulp to the extent of 50 tons per day was to be in operation within a few days. The sulphite will be 36 hours cook and will be bleached electrolytically. In the operation of the pulp mill many new methods are embodied, especially in barking, bleaching, beating, steaming and acid making. Several of these processes have been developed and perfected by the company's own engineers and are not in use elsewhere. The equipment of the

plant consists of a sulphite drying machine 100 ins. wide and a board machine 36 ins. wide. The first sod of the new plant was turned only about a year ago. The mill buildings are entirely of steel and reinforced concrete, and are located at the mouth of the Nepisiguit River.

The Five Fingers Lumber Company, Limited, has been incorporated with head office at Anderson Siding, N. B., and capital stock of $9,950, to carry on in the province of New Brunswick a general business in lumbering and in the purchase, sale and manufacturing of lumber and the products of lumber. The incorporators are J. B. Michaud, J. E. Fournier, P. Arseneau, J. A. Savoie, J. Pepin, all of Anderson Siding, N. B., P. S. Cyr, of Van Buren, Me., A. M. Chamberland, Grand Falls, N. B., P. Chamberland, Five Fingers, N. B., and A. C. Dionne, of Edmundston, N. B.

Western Canada

The Albert Kuno Lumber Company, Glenella, Man., have sold out to the J. J. Crowe Company, Limited, Winnipeg, Man.

The Moose Jaw Sash & Door Manufacturing Company, Moose Jaw, Sask., has been succeeded by the Moose Jaw Sash & Door Manufacturing Company, Limited.

The J. J. Crowe Company, Limited, New Dale, Man., lumber dealers, have made application to increase their capital stock from $20,000 to $50,000, and to move their headquarters to Winnipeg.

Fire recently destroyed the mill of the Tenino Lumber Company, Tenino, B. C. It started from an explosion in the boiler room. Lumber in the yards and several cars were burned. The loss amounted to $60,000.

The Alberta Farmers Co-operative Elevator Company, Limited, Lougheed Building, Calgary, Alta., have awarded a contract for lumber for their Alderside elevator to the Riverside Lumber Company, Riverside, Alta. It is reported that the company intend to erect nine other elevators.

At Kamloops, B. C., much satisfaction on the part of the mills is recorded in consequence of orders which are being received, while in the Nelson district it is reported that the British Canadian Lumber Company at Crescent Valley and the Forest Mills at Cascade expect to resume operations shortly

E. R. Person, Lloydminster, Sask., reports that in the destruction of his mill by fire at Onion Lake, Sask., recently, the loss amounted to $3,000, and that there was no insurance. He has not definitely made up his mind in regard to rebuilding, but is likely to do so as soon as he can make the necessary arrangements.

The Union Land & Timber Company has secured an extra-provincial charter to carry on business in the province of British Columbia with head office at 709-15 Fletcher Trust Building, Indianapolis, Ind., and Provincial office at the Bank of Ottawa Building, Vancouver. The capital stock of the company is $100,000. E. J. Deacon, Vancouver, is the attorney for the company.

The Pacific Fir Company has secured an extra-provincial charter with head office at Seattle, Wash., and Provincial office at Government & Humboldt Streets, Victoria, B.C., and capital stock of $100,000 to carry on business as manufacturers of lumber, ties, poles, posts, piles and shingles and to operate factories and mill in the State of Washington and elsewhere. Mr. F. J. O'Reilly, Victoria, is attorney for the company.

A Vancouver, B. C., despatch states that the complete re-organization of the British-Canadian Lumber Corporation is foreshadowed by the report of the preferred share and note holders' meeting held in London recently, and the accountants' report prepared for the receiver, Mr. R. W. Middleton. It is proposed to do this by the immediate issue of $550,000 seven per cent. receivers' certificates, which will form a first charge on all the assets excepting logs and lumber pledged to the banks in order to save the property from wreckage. This issue would take care of pressing obligations and those of the immediate future, and assist the note-holders in saving their interest, amounting to over $1,000,000 three-year eight per cent. collateral gold notes, the security being $3,500,000 first mortgage six per cent. bonds deposited with the Royal Trust Company. This action, it is reported, presumes the obliteration of the $9,931,500 common stock outstanding, and leaves the future of the $8,864,400 somewhat in doubt.

Owing to the scarcity of tonnage and the urgent demand for Pacific Coast lumber in New York the old freighter Wellington, built in 1884 and operated for a number of years in the 'Frisco-Nanaimo coal trade, has been repaired and refitted, and on June 8th left Esquimalt harbor for Genoa Bay Mills to load 1,200,000 feet of lumber for the Atlantic Coast, via Panama Canal route.

The first shipment of lumber ever made from this Coast to Quebec by water was delivered May 14 by the Norwegian steamer Thor, which carried 3,735,912 feet of Douglas fir loaded on the Columbia River. The passage via Panama Canal occupied 42 days. The barkentine John C. Meyer is now on the way to the Canadian port with 1,088,931 feet of fir, the two cargoes being designed for harbor improvement works.

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914 cut.

Merchantable 1 x 4 x 10/13
Merchantable 1 x 5 x 10/13
Merchantable 1 x 6 x 10/13
Merchantable 2 x 4 x 10/13
Merchantable 2 x 5 x 10/13
Merchantable 2 x 6 x 10/13
Merchantable 2 x 7 x 10/13
Merchantable 2 x 8 x 10/13

all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60 per cent. 12 13 ft.

Cull White Pine—1914 cut

1 in. and 3 in. x 4 in. up x 6/16

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13
3 in x 9 in x 10/13

3,000,000 pieces Mill Run Pine Lath, 4 x 1½ x ⅜, 1915 cut.

1,000,000 pieces Mill Run Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

1,000,000 pieces No. 2 Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

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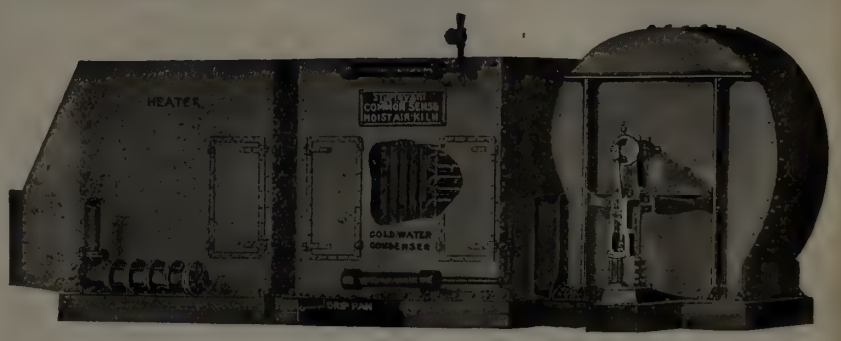

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conform with the department's recommendations in every particular.

They insure perfect and speedy drying with no checks, warps, or split ends. The Sturtevant way is the sure way—It's designed on a scientific basis.

Talk it over with our experts—or get bulletin 220-C.

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Strength and Service

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Two chains may be identical in appearance, yet one is ten per cent. heavier and thirty per cent. stronger than the other. Mere inspection can tell little; the use of a scale and a few simple tests will reveal marked differences.

If you lack facilities, a simple bending test with the aid of a vise and a hand hammer will tell you something. Don't buy a chain that breaks short under the hammer, for you want a tough, not a brittle chain.

Subject our chains to the most thorough comparative tests and you will find substantiation of our claim that we give you more pounds of service and units of durability than any other maker. And what is more important, forty years of experience as chain makers have taught us how to maintain the high standards.

We have chains for every type of transmission, elevator or conveyor, and have engineers to assist you in making proper selections. Write for catalog containing prices and full particulars.

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Last Year's Output of Interior Mills

The total quantity of lumber manufactured last season by the sixty or more sawmills located in the Kootenay-Boundary district was about 225,000,000 feet, as compared with 385,000,000 feet produced in 1913, which total in turn fell far below the record for 1912. Ever since 1911, when the American mills commenced shipping to our prairie provinces in large quantities, the millmen of the interior have been suffering from the effects of this invasion of their natural and only market, the result being that production has steadily dwindled. This reduction in the output is the more keenly felt because lumbering is the chief industry in the way of furnishing employment both summer and winter under normal conditions. The past winter, owing to the serious depression brought about by the war, very few of the interior mill companies have done any logging, and should a keen demand for lumber make itself felt in the spring months, some of the millmen will find it difficult to replace their yard stocks.

One branch of the lumbering industry of the district in which activity has not been interfered with to the extent it has in other branches, is the pole and tie industry. Here and there throughout the entire district are spread pole yards. On the Arrow Lakes at Nakusp and other points, there are extensive pole yards which supply thousands of poles annually to the railway, telephone and telegraph companies. At Hall, B. C., the Mankin Lumber Company is shipping poles to the central states of the United States, and an extensive business is carried on by this firm with other states of the Union to the south. The Churchill Lumber Company and Dr. McEachern, of Ymir, are also large producers of poles.

Good Enquiries from Export Markets

Victoria, B.C., July 5th: A steady stream of enquiries for British Columbia timber is being received by the Minister of Lands from British, Australian and New Zealand firms. These come both through the Department of Trade and Commerce, Ottawa, and direct, the latter as a result of letters sent from Victoria to the principl importers inviting enquiries and giving information concerning the various woods of the Province available for export. Such enquiries are at once sent out to the mills, in order that they may communicate with overseas importers either direct, or through the Forest Branch, Victoria, with the least possible delay.

The American Lumberman, in an article dealing with the widespread campaign against the use of shingles and other wood products, says: "In their own defense the manufacturers of lumber and of shingles should prepare, first, to fight definite battles in various cities against ruinous and unnecessary revision of the building ordinances, and, second, to ascertain and give the actual facts to the general public, which naturally is favorably disposed toward frame construction and shingle roofs because of their long use and satisfactory record of these materials." In this connection it is only fair to point out that lumbermen as a class have of late years been doing a fair amount of publicity work, although far less than is done by their opponents, the cement and brick manufacturers. The shingle men, however, have been doing practically nothing for the protection of their industry, with the result that sales of patent roofings are constantly growing larger.

Three deal laden vessels which sailed from Halifax for England recently are engaging in a trial of speed across the Atlantic. Two of them are very evenly matched in speed and, barring submarines, should arrive at the other side within a short time of one another. These two are the three-masted schooners Mary Hendry and J. L. Nelson. The third craft is, as far as racing is concerned, a more or less unknown quantity. She is the Norwegian bark Socotra. If she has fair winds all the way across she may worry the schooners. Head winds would of course work more to her disadvantage than to that of the fore-and-aft vessels.

The Timberland Lumber Company, Limited, Craig's Siding, on the Fraser Valley line of the B. C. E. Ry., recently added a large block of old growth timber to their already extensive holdings, and the logging railway is being extended to top the new limit. Two heavy donkeys have been installed, lighter equipment heretofore in use being disposed of. The mill was closed down for two weeks while changes were being made. J. G. Robson, the energetic president of the company, says the new limit runs 90 per cent. fir, and will furnish

---

The British steamer Trevince arrived at Hastings Mills, Vancouver, about June 15th to load the first consignment of an order for 10,000,000 feet of lumber placed by the British Admiralty in May. Part of the cargo was furnished by the Victoria Lumber & Manufacturing Company, Limited, Chemainus. Four or five vessels will be sent here at intervals to move the big order.

PRATT & WHITNEY CO.
OF CANADA, LIMITED

SMALL TOOLS

Taps — Dies — Reamers — Cutters — Drills

MADE IN CANADA

As good as money can buy—Guaranteed absolutely!

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Timber Land Factors

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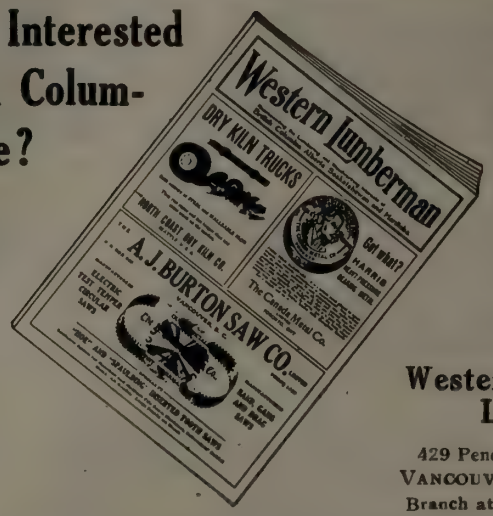

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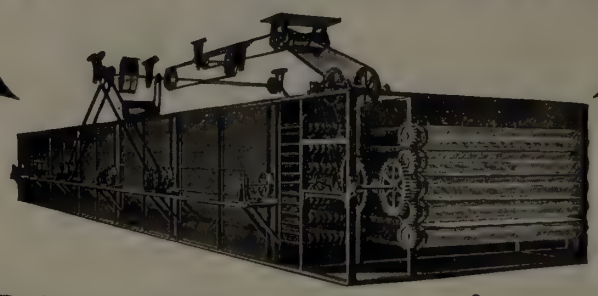

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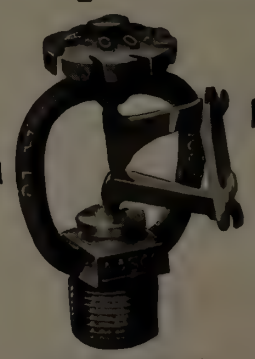

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Engineers and Machinists ***PENETANGUISHENE, ONT.***

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"Acme Waterproof" brand is made for the wet places in a mill and will give a remarkable service under the most trying conditions.

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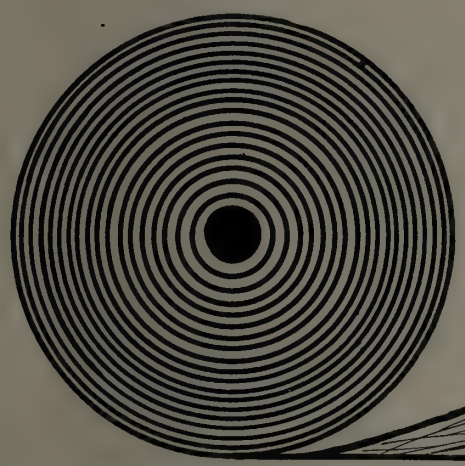

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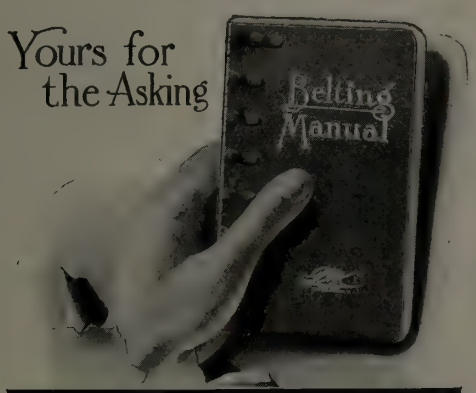

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The rates are most reasonable, write us.

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For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

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Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

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Made in sizes 1/4" to 15/8"

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This engine is 13½ ins. x 18 ins. and weighs 35 tons.

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Grey Iron Castings—any size or shape—ordinary or intricate—made promptly. New foundry, splendidly equipped. We would be pleased to quote on castings—singly or by contract. We also make drop forgings of all descriptions.

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1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
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1 x 4 and 5-in. x 9 to 16 ft.	17 00
1 x 6-in. x 9 to 16 ft.	20 00
1 x 8-in. x 9 to 16 ft.	21 00
1 x 10 and 12 in. x 9 to 16 ft.	22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.	19 00
1-in. No. 2, 6-ft. to 16-ft.	16 00
2 x 4 to 12, 10 and 16 ft.	19 00
2 x 4 to 12-in., 12 and 14 ft.	19 00
2 x 4 to 12-in., 18 ft.	22 00
2 x 4 to 12-in., 20 ft.	24 00
2 x 4 to 12-in., 22 ft.	25 00
2 x 4 to 12-in., 24 ft.	26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.	16 00
Clear in B. C. cedar, kiln dried	50 00

Douglas Fir:

Dimension Timber up to 32 feet:	
8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.	31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.	32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.	32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.	33 00
10x20, up to 32 ft.	33 50
6x18, 8x18, up to 32 ft.	34 00
6x20, 8x20, up to 32 ft.	35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00	
Ash, white, No. 1 common	45 00	
Ash, brown, 1sts and 2nds, 4/4	50 00	
Ash, brown, common and better	39 00	
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00	
Birch, 1sts and 2nds, 4/4	39 00	
Birch, No. 1 com. and bet., 4/4	30 00	
Birch, 1sts and 2nds, 6/4 and 8/4	42 00	
Birch, 1sts and 2nds, 10/4 and 12/4	45 00	
Birch, 1sts and 2nds, 16/4	50 00	
Basswood, 1sts and 2nds, 4/4	40 00	
Basswood, No. 1 com. and bet., 4/4	30 00	
Basswood, No. 2 and 3, common	18 50	
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00	
Basswood, 6/4 and 8/4, com. and bet.	38 00	
Basswood, 4/4, No. 2 com. and bet.	28 00	
Soft elm, 1sts and 2nds, 4/4	40 00	
Soft elm, No. 1 com. and bet., 4/4	28 00	
Soft elm, No. 2 and 3 common	17 50	
Soft elm, 6/4 and 8/4, 1 and 2	42 00	
Rock elm, 1sts and 2nds, 6/4 x 8/4	55 00	
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00	
Soft maple, 1sts and 2nds, 4/4	33 00	
Soft maple, com. and bet., 4/4	25 00	
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00	
Hard maple, 1sts and 2nds, 4/4	37 00	
Hard maple, common and better, 4/4	28 00	
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00	
Red oak, plain 1sts and 2nds, 4/4	59 00	
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00	
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00	
White oak, plain, 1sts and 2nds, 4/4.	59 00	
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00	
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00	
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00	
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00	
White oak, ¼ cut No. 1 common	55 00	
Hickory, 1sts and 2nds, 4/4	70 00	
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00	

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in.	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards:		
1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 30 to 35 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.	19 00
1, 1¼, 1½ and 2-in.	20 00
No. 2	17 00 18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension S. 1 S. and 1 E.	6 ft.	8 ft.	10 ft.	14x16 ft.
2 x 4	14 00	17 00	20 50	18 50
2 x 6	14 00	17 00	20 50	18 50
2 x 8	17 00	17 50	21 00	19 00
2 x 10	18 00	18 50	21 50	20 00
2 x 12	18 00	19 00	23 50	21 50

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4-12	20 50
2 x 4-8-14-16	20 50
2 x 4-10-18-20	22 50
2 x 6, 8 to 16	20 00
2 x 8, 8 to 16	20 50
2 x 4-6 and 8-in.; 8, 12, 14 and 16 ft.	22 50
2 x 4-6 and 8-in.; 10 ft.	24 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

4 inch	19 50
6 inch	23 00
8, 10 and 12 inch	24 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	25 00

Lath

No. 1 Cedar, pine, spruce (not mixed)	5 00
No. 1 Cedar, pine, spruce (mixed)	4 50
No. 2 Cedar, pine, spruce (mixed)	3 25

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00

No. 3 Edge grain $3.00 per M. extra.

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page)

28 "Service" Branches Throughout Canada

Canadian Consolidated Rubber Co., Limited

Montreal, P. Q.

"TAKING ONE'S OWN MEDICINE"

When you find a physician "taking his own medicine," you can usually rely on his diagnosis.

Of the thousand-and-one articles of rubber which we manufacture, practically all are used by us in our own offices, in our own factories, or in our own homes.

WE TAKE OUR OWN MEDICINE

Our line-up is complete, our quality is unexcelled, and our prices are right. Let us show you what we can do.

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Canadian Consolidated Rubber Co., Limited

Montreal, P. Q.

28 "Service" Branches Throughout Canada

CURRENT LUMBER PRICES—Continued

No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	40 - 42	26 - 28	14 - 16
5/4 to 8/4	42 - 44	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00

Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	48 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8		37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8		29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	25 00	27 00
Spruce 12 in. dimension	26 50	28 00
Spruce, 9 in.	23 50	24 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	20 00	22 00
All other random lengths, 7-in. and under, 10 ft. and up	21 00	21 50
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22 00
1⅝-in. spruce laths		4 10
1½-in. spruce laths		3 75

New Brunswick Cedar Shingles

Extras	3 25	3 40
Clears	2 60	2 90
Second clears	2 50	2 60
Clear whites		2 30
Extra 1s (Clear whites out)		1 50
Extra 1s (Clear whites in)		1 00
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 40	3 50
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear	3 30	3 40

Fleming's Remedies

Protect Your Horses

Prevention is better than cure. You should protect your horses as you do your employees. This will prove profitable too, for the loss of valuable horses cannot be measured in dollars and cents alone.

You can protect your horses from sudden sickness by keeping a good supply of Fleming's Remedies on hand. They keep your horses in good condition and save you cost of veterinary calls.

List of Remedies

FLEMING'S VETERINARY HEALING OIL
For Cuts, Galls, Wounds and Sores. Large size. Price ... $1.00

FLEMING'S COLIC CURE
A prompt remedy for both Spasmodic and Flatulent Colic. Price ... 1.00

FLEMING'S SPAVIN CURE LIQUID
An active Blister for Splints, Curbs, Recent Bone Spavins, and Soft Enlargements. Price ... 2.00

FLEMING'S SPAVIN AND RINGBONE PASTE
For all well established cases of Bone Spavin, Ringbone and Sidebone ... 2.00

FLEMING'S SWEENY CURE
A mild blister, cures Sweeny, Shoulder Lameness, etc. Price 1.00

FLEMING'S TONIC HEAVE REMEDY
A thorough Tonic and Blood Purifier that cures a score of ailments besides heaves. Price ... 1.00

FLEMING'S VETERINARY EYE LOTION
Cures Inflammation of the Eyes. Price ... .50

FLEMING'S FISTULA AND POLL EVIL CURE
For Fistula and Poll Evil in all their stages, and for diseases of the feet such as Thrush and Quittor ... 2.00

FLEMING'S DIURETIC POWDERS
For disordered Kidneys, Fever, etc. ... 1.00

FLEMING'S CHRONIC COUGH POWDERS
For Chronic Cough, Colds, etc. ... 2.00

FLEMING'S ABSORBENT
Reduces enlarged Glands and all Soft Lumps ... 2.00

FLEMING'S SEDATIVE LOTION
Relieves all Heat and Inflammation. A splendid stable lotion 1.00

FLEMING'S GENERAL LINIMENT
Used on all cases that can ordinarily be treated by applying a liniment ... 1.00

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Our Remedies are known from coast to coast, and thousands of satisfied users can speak as to their worth.

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Manufacturers of Lumber Tools

PEMBROKE - - - - - ONTARIO

MADE IN CANADA

It's a Pink anyway you take it, and it's the best Peavey made.

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa,
December 20th, 1912.

Deputy Minister.

CANADA LUMBERMAN BUYERS' DIRECTORY

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Hoyt Metal Company
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Dodge Mfg. Company, Limited
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Waterous Engine Works Company

PULP MILL MACHINERY
Hamilton Company, William
Moreau Barking Machine Company

Continued on page 64)

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.
E. J. Macintyre, 1413 Great Northern Bldg., CHICAGO.

SAW MILL OWNERS

How much does it cost you each time you are forced to stop your machinery through over-heated bearings?

FLOTA-MICA

cuts out this trouble and reduces your oil bill from 40 to 50%.

Send for a 5 Pound Can on a 30 Days' Trial

S. A. PAKES

77 York St. Tel. Adel. 1202 **TORONTO**

Garlock Packings

Are made in over two hundred styles and combinations to meet every known requirement. We will assume entire responsibility in selecting the proper styles and combinations of our packings to work successfully and economically under any stated condition; and if goods are not wholly satisfactory to purchaser we will refund promptly the cost of same. A card will bring our new catalog which fully describes our various styles of packings.

Style No. 777

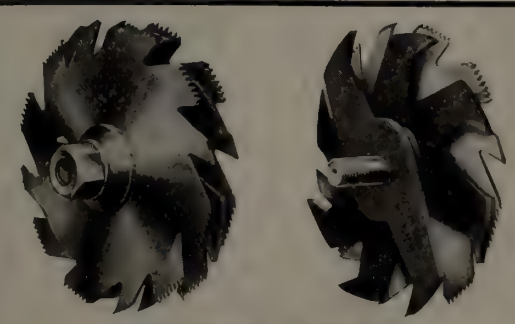
Style No. 150

The Garlock Packing Co.

Hamilton, Ontario

Branches: Calgary Montreal

Branches: Toronto Winnipeg



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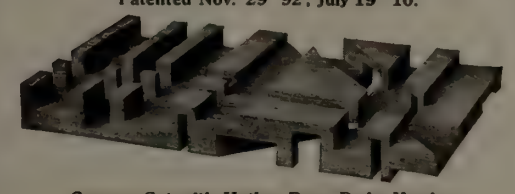

Grooves Cut with Huther Bros. Dado Heads

Fits Any Saw Mandrel

A Huther Bros. Dado Head consists of two outside cutters and enough inside cutters to make the required cut. This Head will cut perfect grooves, with or across grain, any width. It is an easy Head to keep in perfect condition, has a simple quick adjustment, and may be enlarged any time after purchase. Sent on approval and if not satisfactory return at our expense.

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ROCHESTER, N. Y.

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Smart-Turner Machine Company
Waterous Engine Works Company

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RUBBER GOODS
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Turner Brothers Canada, Limited

SASH
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Haeberle Lumber Company
Rat Portage Lumber Company
Rimouski Industrial Company
Tessier, Alphonse

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Cocker Manufacturing Company
Disston & Sons, Henry
Hoe & Company, R.
Radcliff Saw Mfg. Company
Shurly-Dietrich Company
Simonds Canada Saw Company
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Berlin Machine Works
Hamilton Company, William
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Payette & Company, P.
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Brown Corporation
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Fraser-Bryson Lumber Company
Gillies Bros.
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Mackarell & Company, Thos.
Mason, Gordon & Company
Miller Co., Ltd., W. H.
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Quebec & St. Maurice Industrial Co.
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Spencer, C. A.
St. Gabriel Lumber Company

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McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

SNOW PLOWS
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Harris Tie & Timber Company
Spears & Lauder

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WOODWORKING MACHINERY
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St. Gabriel Lumber Company

WIRE ROPE
Thorne & Company, Limited, W. H.

Good Food Produces Energy

MR. LUMBERMAN AND CONTRACTOR :—

We wish to thank you for your valued business in past seasons. We are in a better position than ever to supply your wants and will appreciate your inquiries when you are in the market for any of the following :

Rainbow Flour—High Patent Manitoba.
Goldie's Star—Famous Blended Flour.
Lily Flour—For Pies and Pastry.
Rolled Oats, Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

ABSOLUTE PURITY GUARANTEED.

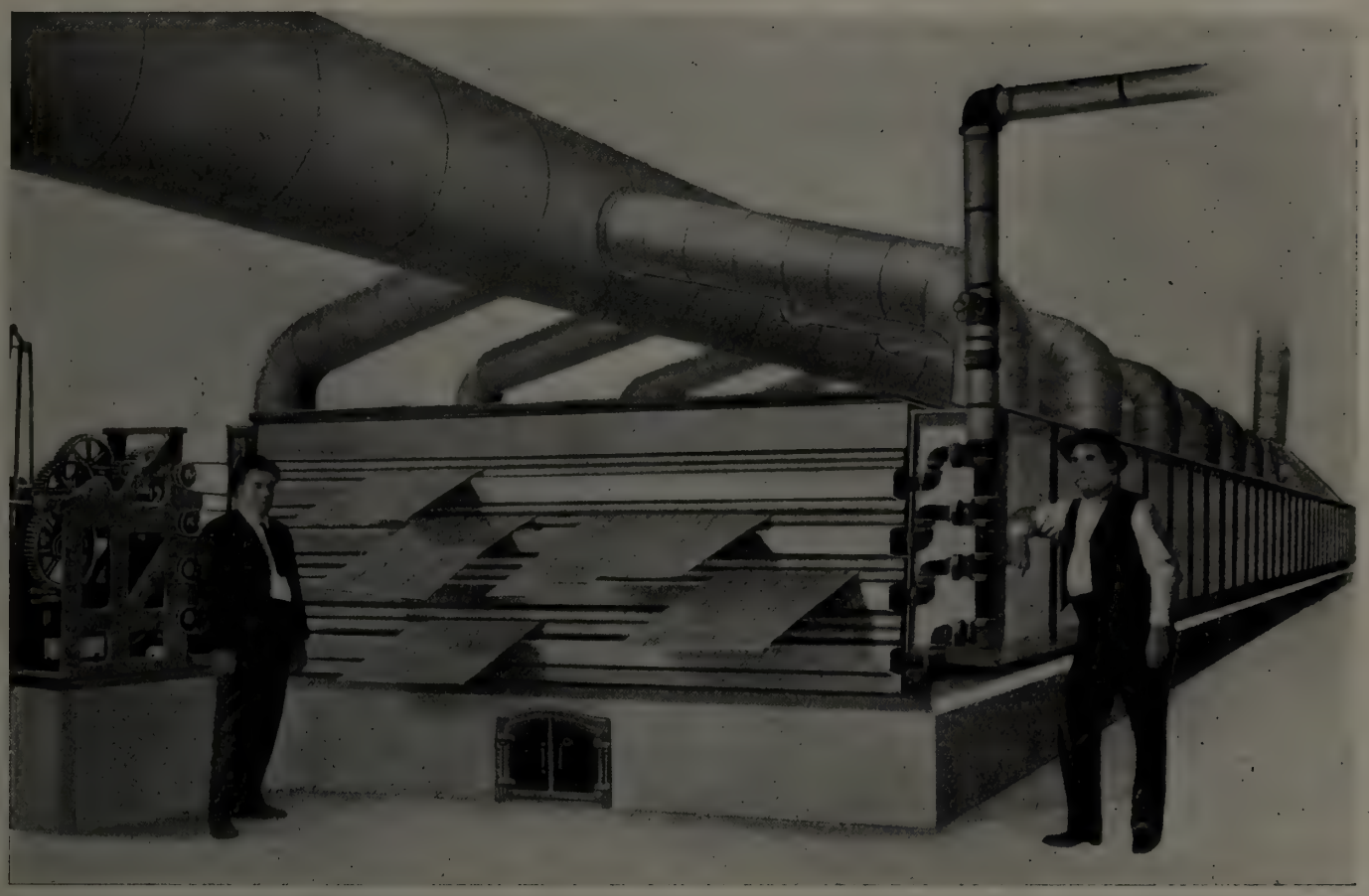
Your men will appreciate the high quality of our cereals. **Most important is the fact that men who are well fed can give much better service.**

PATRONIZE CANADIAN INDUSTRIES

Canadian Cereal and Flour Mills, Limited

Royal Bank Building, TORONTO, ONT.

Coe Veneer Machinery



The Coe Automatic Roller Dryer is designed and built entirely of steel, iron and asbestos which construction gives it unusual durability and ability to withstand the severe service of being operated under the high temperature necessary to dry veneers thoroughly and rapidly.

The Coe dryer will handle any size or thickness of veneers of any species of wood. It will deliver them bone dry, commercially flat and even without splits, wrinkles or checks or without discoloring, glazing or polishing their surface.

The green stock is fed into one end of the dryer and it travels in one direction to the other end of the dryer where it is delivered bone dry ready for the glueroom, stockroom or shipping.

Coe dryers have been designed and built for handling all kinds and thicknesses of stock and for all capacities.

Write us for complete catalogue

The Coe Manufacturing Co.

PAINESVILLE, OHIO, U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer mill equipment in the world.

The Mark of *Quality*

Feed Valves

Don't keep on "getting along" with leaky or inefficient steam feed valves. A set of "Long" valves will make a surprising difference in the speed of the carriage, especially in turning the corners. The saving in steam will be noticeable too. If you are short of power, this is a big consideration.

"Long" valves are popular with mill men because they are efficient in design, and of high grade workmanship.

Right when they leave the shop—
Right after years of service.

The cost is remarkably small.

Get the bulletin.

The E. Long Manufacturing Co., Limited

Orillia, Canada

Agencies: **MONTREAL—Williams & Wilson, Ltd.** **EDMONTON and CALGARY—Gorman, Clancey & Grindley Ltd.**
WINNIPEG—Stuart Machinery Co, Ltd. **VANCOUVER—Robert Hamilton & Co.**

Three Advantages

A Locking Device—that crowds the saw guides into correct position automatically and locks them there.

Double Contact Saw Guides—that hold the saw blade both at the centre and at the rim.

Extra strength in all working parts.

These mean—***correctly edged lumber, smooth edged lumber, and lots of it.***

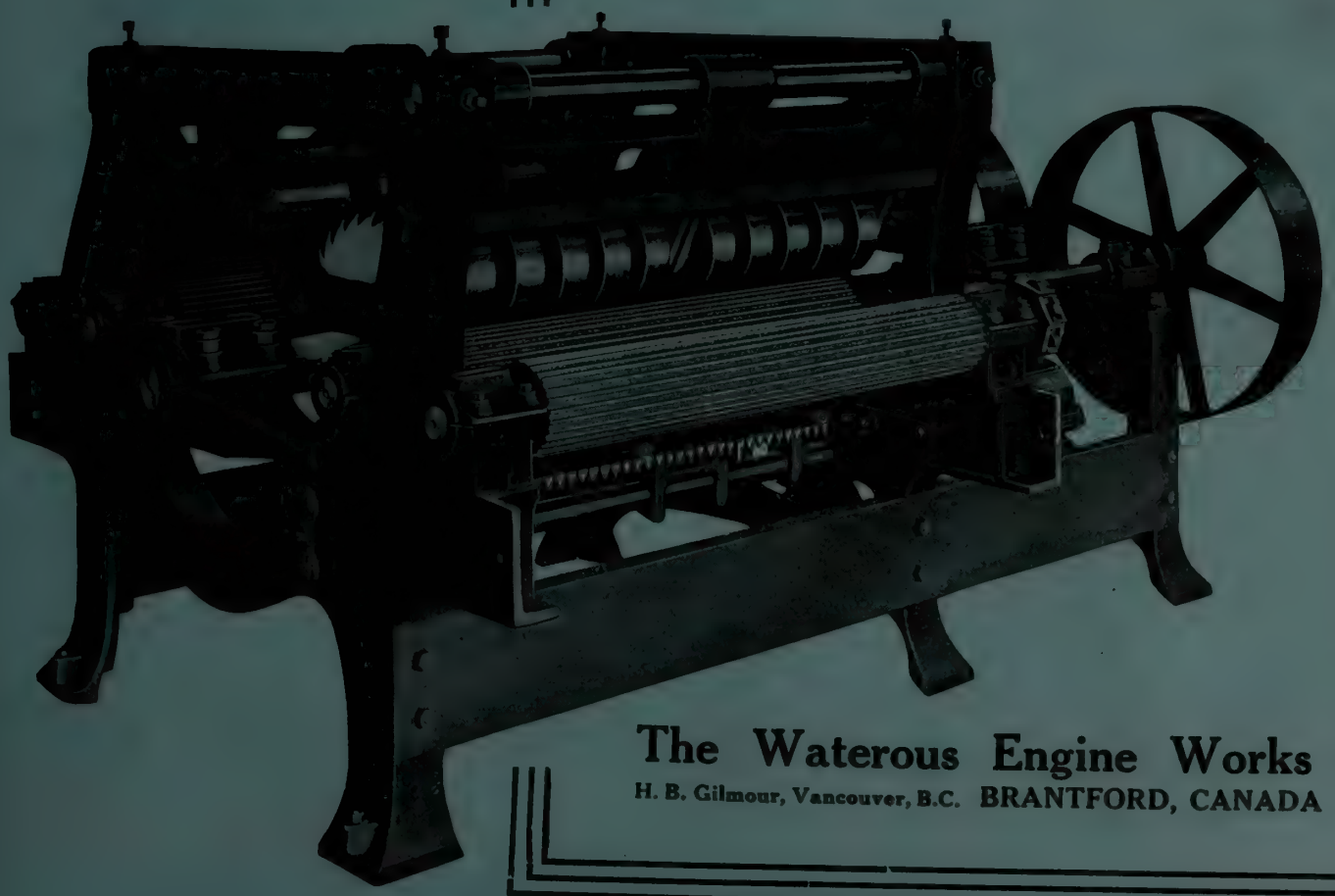
WATEROUS

NEW CHAMPION EDGER

If you want to edge your lumber to dimension without further dressing, your edger guides **must** hold the saws **exactly** in correct position all through the cut. The guides in our New Champion Edger do this.

A locking gate that extends across the front of the edger below the front roll, drops down over the guides, crowds them into exact cutting position **and holds them there.** Lost motion in the levers doesn't affect the setting of the saws.

The guides themselves are massive and rigid. They carry **two sets of saw plugs** to hold the saw close to the rim and near the centre. The saws can neither shift nor wobble in the cut no matter how heavy the stock going through is.



To make these two features of worth, the rest of the Edger is made just a little stronger than is usual. As a result a 6-in. cant will go through the machine as easily as a 2-in. plank and will come out **edged to a hair.**

This edger is built with 40-in., 48-in. and 56-in. opening. If you have not seen it at work send for catalogue 113. **It's worth a look over.**

The Waterous Engine Works Co., Limited

H. B. Gilmour, Vancouver, B.C. **BRANTFORD, CANADA** **Winnipeg, Man.**

$5,000,000.00
worth of mixed metal sold annually.

"FROST KING" METAL

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. **Price 30c per lb., Fort William and East; West of Fort William 35c per lb., delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.**

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, **40c per lb.**; West of Fort William, **45c**, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

For 50 Years

"Camel" Belting Has Been Sold

Stock 2" wide to 24" wide for immediate delivery.

THE "CAMEL HAIR" BELT shown above is 12 inches wide, developing 100 H.P. It has been in continuous use since the year 1890.

During the first 10 years it ran exposed to the weather (extreme cold and extreme heat, rain, sun and ice.)

In 1900 it was covered in and at this date (1915) after 25 years of hard service it is still running and carrying an increased H.P. with 100 per cent. efficiency.

Telegraph at our expense.

BEWARE OF IMITATIONS.

The Trade Mark on belt is our guarantee and your protection.

Sole Makers **F. Reddaway & Company**

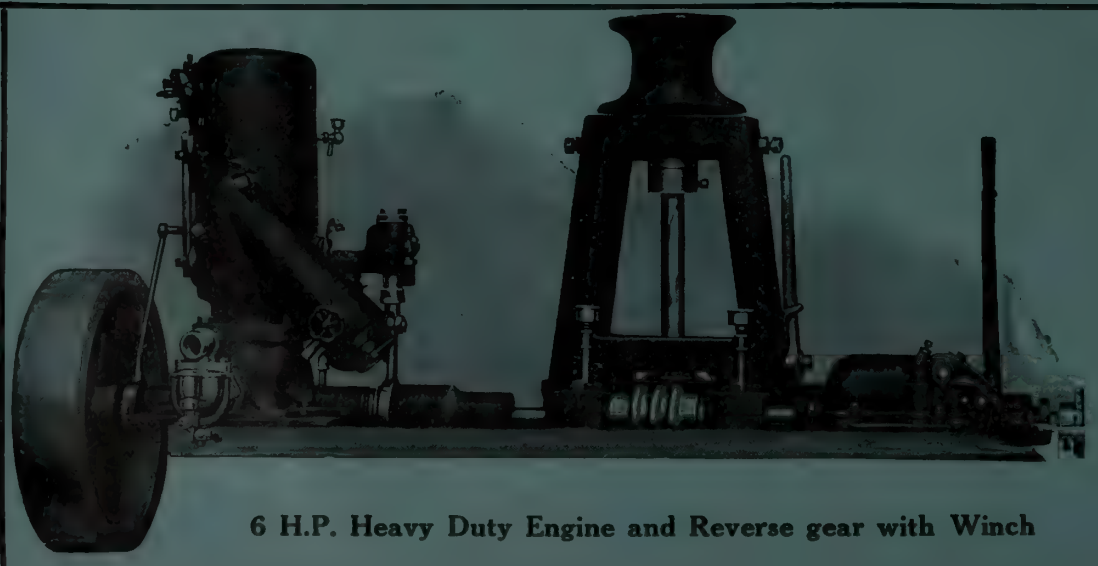
653 St. Paul St. West, MONTREAL, QUE.

Stocks carried by our Selling Agents:— A. R. Williams Machinery Co. Ltd., Toronto, Ont. A. R. Williams Machinery Co. of Winnipeg, Ltd.

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co.
Limited

General Mill Supplies MONTREAL



6 H.P. Heavy Duty Engine and Reverse gear with Winch

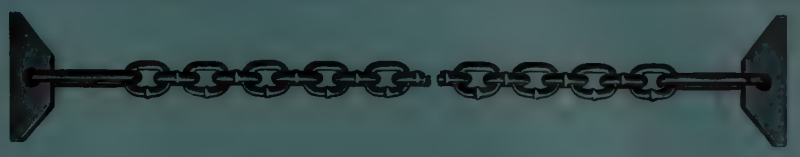
River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.

Canada Lumberman & Wood Worker

New **RAILS** Relaying
12 to 80 pounds per yard.
LOGGING CARS
Jno. J. Gartshore
58 Front St. West, Toronto



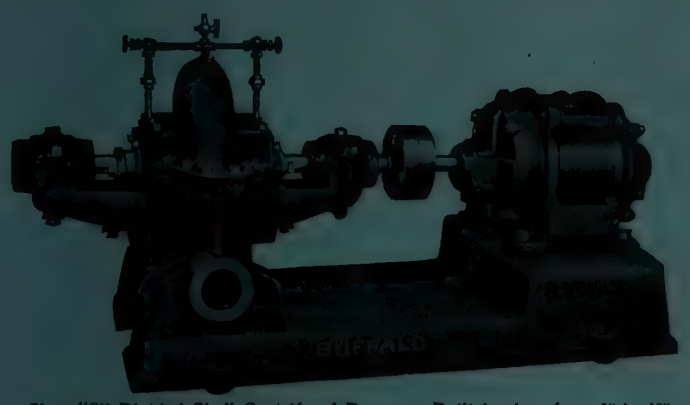
Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.



Class "S" Divided Shell Centrifugal Pumps. Built in sizes from 1" to 48" discharge—for capacities from 25 to 80,000 gallons per minute.

EFFICIENT — DURABLE — ACCESSIBLE

You want pumping equipment that requires as little power as possible —that gives satisfactory year after year service—that is easy to inspect and take apart when repairs are necessary.

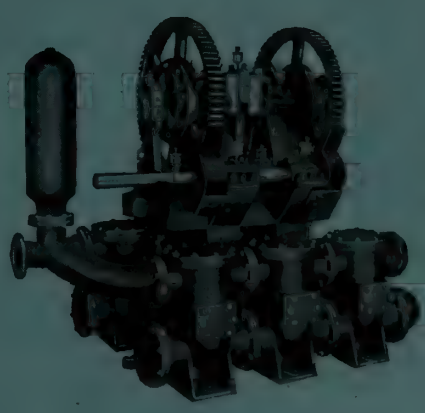
Canadian Centrifugal Pumps

"Made in Canada"

have all of these desirable features—and many more.
MAY WE SEND YOU BULLETIN 270-17?

Canadian Blower and Forge Co., Limited
BERLIN, ONTARIO
St John Montreal Toronto Winnipeg Vancouver

GENUINE "TURBROS"
Balata Belting
Waterproof and Stretchless.
The best belt for sawmills.
Manufactured and guaranteed by
Turner Bros. Canada Limited
Montreal — Vancouver

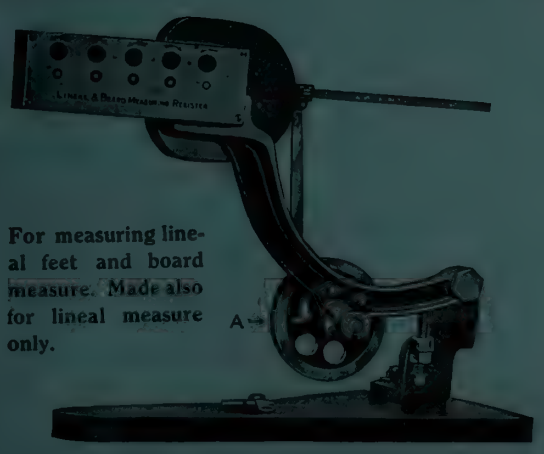


Do you realize

That when you buy a Smart-Turner PUMP you contribute to Canada's industrial welfare, since every part of every one of these pumps is MADE-IN-CANADA?

You also Buy the Best.

The Smart-Turner Machine Co., Limited
HAMILTON - - CANADA



For measuring lineal feet and board measure. Made also for lineal measure only.

Increase the efficiency in your mill—Reduce your lumber handling costs—and lessen the labor of your men by installing a

Morrison Lumber Measuring Register

This register can be attached to your planer, moulder, resaw, matcher, your sorting table, or any other place you require. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

The Morrison Register can be used in the sawmill, planing mill, furniture factory, woodworking plant or lumber yard. This register is solidly constructed and guaranteed accurate. Used by many of the largest concerns in the country. Sent on trial to any reputable firm.

WRITE US FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertisers, Page 66 Classified Directory to Advertisements, Page 56

Made in Canada

"AMPHIBIA"

The Waterproof Belt That Grips Your Pulleys

In buying a belt remember that you are not making a purchase where a few dollars saved on a lower grade article is a real saving. You are buying a medium to carry the most expensive thing in your plant—power. Nothing but the very highest grade of leather belting should be tolerated.

"AMPHIBIA" waterproof leather belting is pliable, firm with minimum stretch and maximum tensile strength and durability. "AMPHIBIA" grips the pulleys perfectly and transmits more of your power than other belting.

"AMPHIBIA" belting is particularly suited to the difficult runs in saw mills, pulp mills, veneer plants and other industries where wet or green lumber is handled.

When ordering state where the belt is to run.

Write us for prices.

"AMPHIBIA"

"AMPHIBIA"

"Leather like gold has no substitute."

Sadler & Haworth

Tanners and Manufacturers

For Over 36 Years Makers of the Best Leather Belts

MONTREAL	TORONTO	ST. JOHN, N. B.	WINNIPEG	VANCOUVER
511 William St.	38 Wellington St. E.	149 Prince William St.	Galt Building	107-111 Water St.

To insure satisfaction—State where belt is to run

White Cedar Shingles

Our Mills have now started and we can ship promptly White Cedar Shingles in all grades.

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8/4 x 9 x 10/16	60,000	8/4 x 12 x 17/22	4,500
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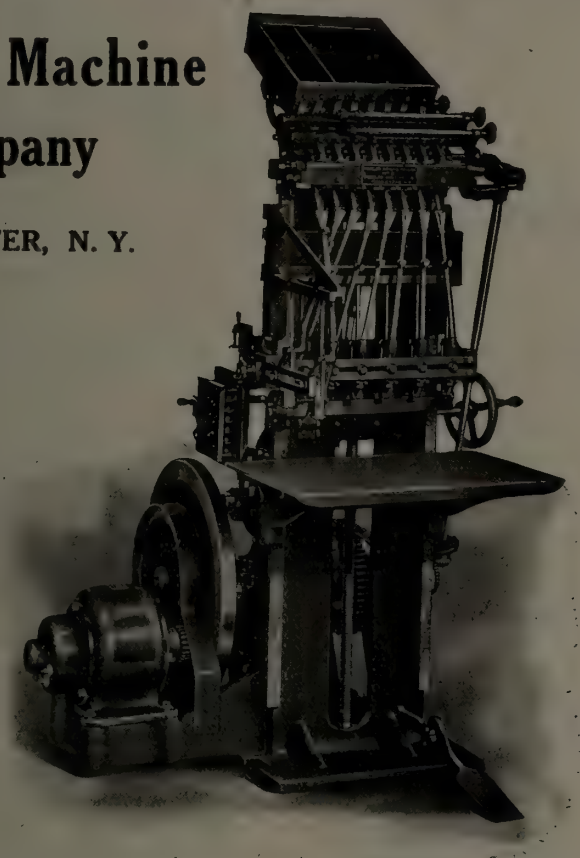

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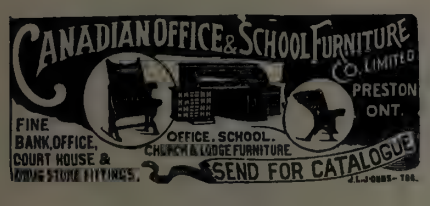
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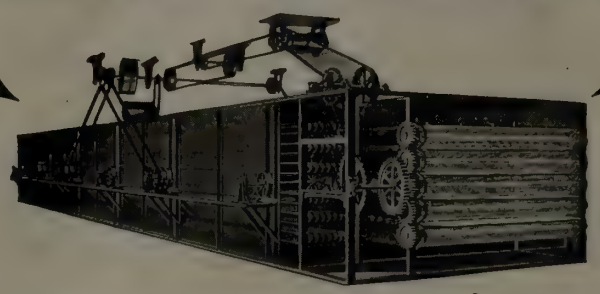

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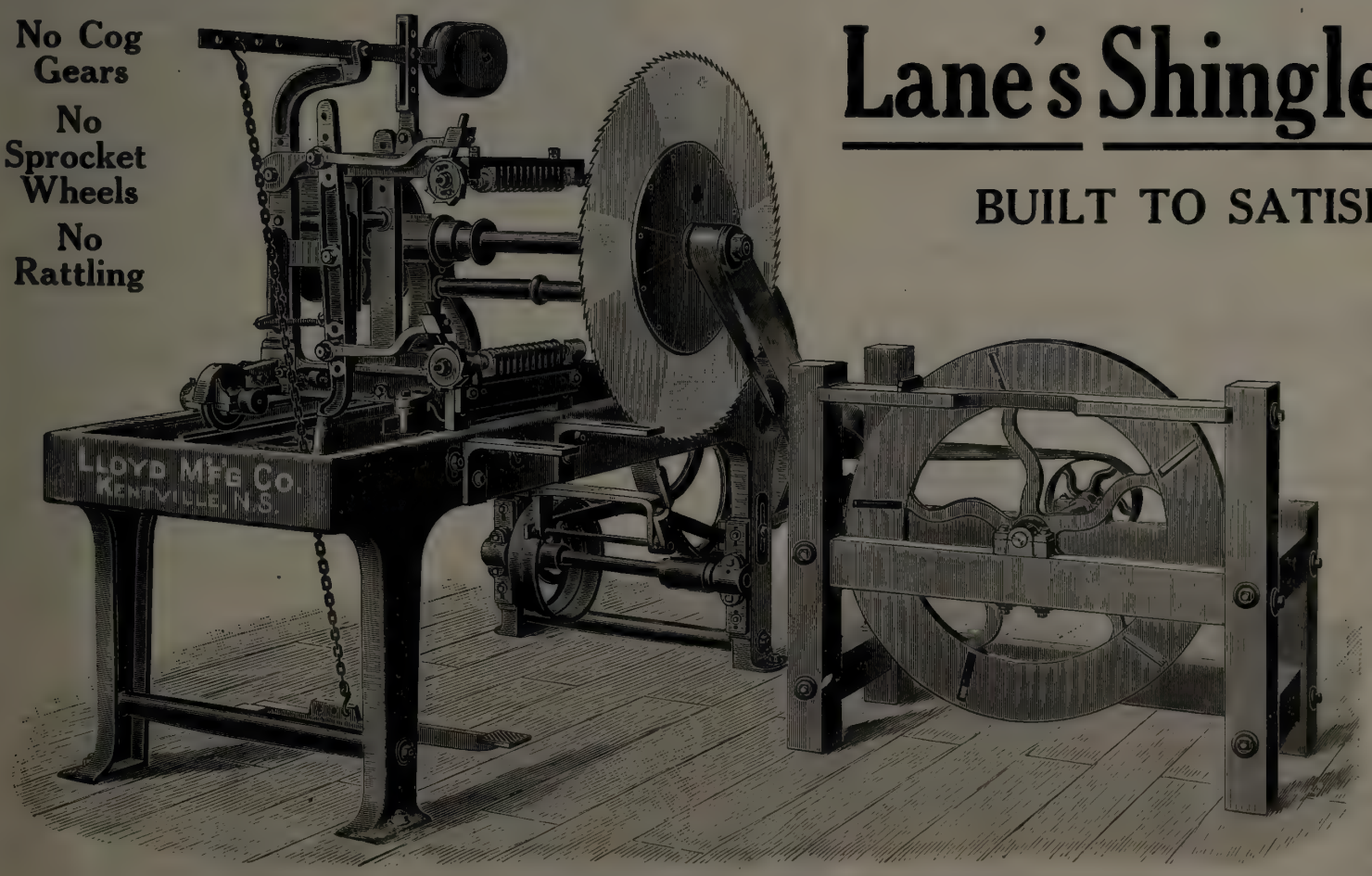

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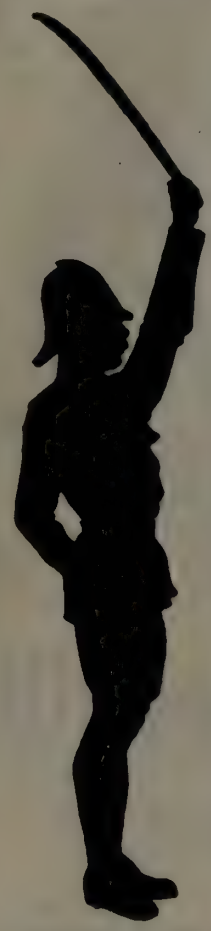

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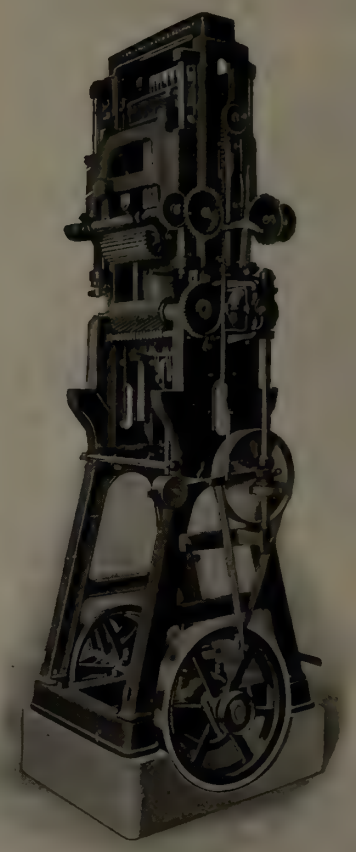

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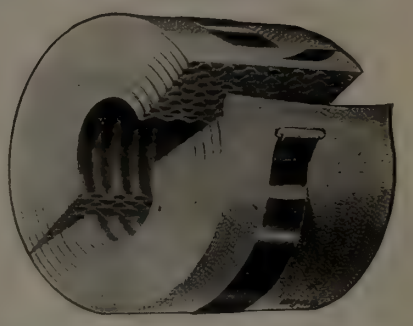

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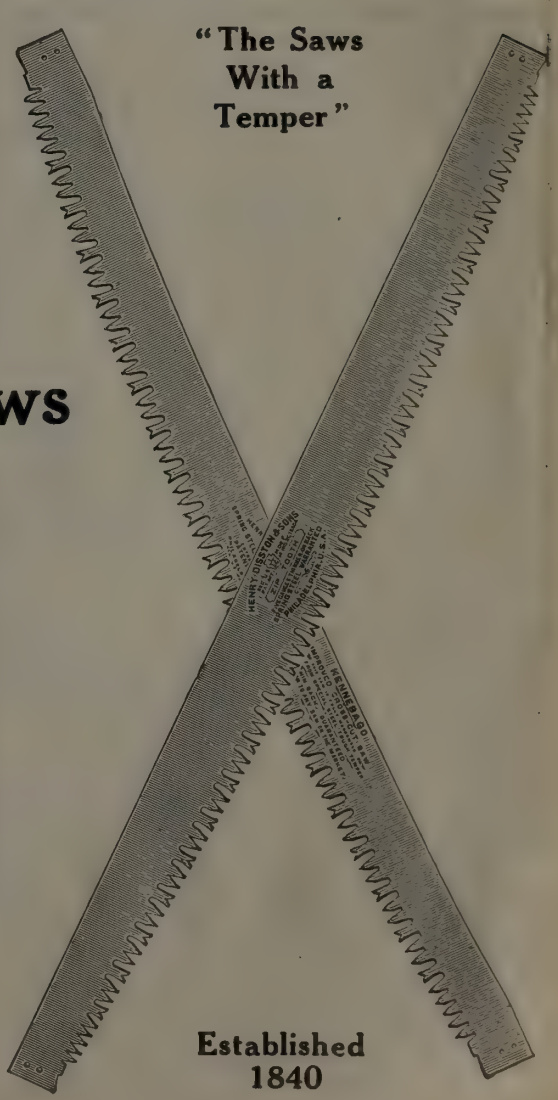

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Canada Lumberman & Wood Worker

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"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

Authorized by the Postmaster General for Canada, for transmission as second class matter.

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Honesty and Profits

One of the speakers at the recent annual meeting of the National Hardwood Lumber Association, during the course of a discussion about the proposed co-operation of the hardwood men and the furniture manufacturers, had something to say about business methods which, while it may not have been given much attention at the time, contained the kernal of something that is important to the trade. Evidently a representative of the furniture manufacturers who had been invited to address the hardwood men had said something about honesty in connection with grades, which struck home rather deeply, not because of the sins of those whom he was addressing, but because of the fact that the general history of the lumber trade, and of nearly every other line of trade, bears witness that we are still far from the millenium so far as square dealing with our customers is concerned. The National Hardwood Lumber Association has done much both to standardize grading of hardwood and to standardize honesty and put it at a premium. For this reason the speaker mildly resented the remarks of the furniture manufacturer and referred to the fact that in connection with every transaction it should be the effort of each party to handle it with as high a grade of intelligence and honesty as possible. No one party should consider that all the honesty in connection with a deal should be shown on one side and all the intelligence on the other. There ought to be a nice balance of both between both parties; and incidentally, he suggested that the furniture men had given in the past just as good as they had received when the question of honesty was considered. He intimated that everyone who had sold stock to the big furniture manufacturers had known something of the bitterness of having contracts cancelled when the market price of lumber declined.

It seems to us regrettable that such remarks as these should have been made in the course of a meeting which was called upon to endorse and rejoice over the steps that are being taken towards a fair measure of co-operation between the hardwood men and the furniture manufacturers. However, a spade is a spade after all, and it may be that, having been uttered entirely in a spirit of generosity, these remarks will do some good. There is no question about the wisdom of the above statement that honesty and intelligence should be equally displayed by both parties to any transaction for the sale of lumber; and there is no question that in the past there has been a very unfair balance of these qualities in far too many instances. It is not our object to preach to our readers, for perhaps we are not any holier than most of them, but it is our place to point out the direct and important relation that exists between sound business methods and honest dealing. As a factor in the successful management of a business, fair treatment to customers is the greatest thing that anyone can name. It is of greater importance than any scheme of systematic management, scientific cost keeping, effective advertising or anything else. It is the fountain head of business success. Today perhaps the question of honest treatment of customers does not occupy so great a place in the attention of the trade as it does when business is active. The real problem today is to get hold of a customer. Once he has been induced to buy, any dealer will understand that he must be treated with every consideration of honesty and encouragement in order to get as much of his trade as possible. Why should not these conditions be appreciated just as much when times are booming? If the importance of this fact depend entirely upon its ethical foundation, we might expect it to be recognized differently by different people according to the way in which they have been brought up; but when its importance is based upon the fact that honesty is the best policy and pays the biggest dividends, it is hard to understand why it is ignored so often as it is during times of business activity.

These remarks are not based on any general ideas gathered from the behavior of men in general. They are based upon correspondence and conversations which we have had with many lumbermen for a number of years. We have, in our wanderings among the trade and in our correspondence, been advised time and again that "so and so" has a business reputation which is not to be envied; that he will mix his grades, make unjust claims for short shipments, and do a number of other things which the speaker or the correspondent rightly condemns. We mentally make a note of such a party and sometimes we happen to hear from him later on. Not infrequently it happens that he has a similar line of complaint to utter about somebody else, or perhaps about the very party who criticized him. Who then is in a position to judge, or to throw stones? That is the pessimistic question we have often put to ourselves. We do know of some whom we fondly believe are so straight in their dealings that they can be classed thus, but why is it that there are not many more of them? After thinking and thinking about this we have come always to the one conclusion. Man, in his early days was something of a predatory animal. In the misfortunes of his fellows he saw opportunities for his own gains. In the course of many centuries he became highly organized from a social point of view, until nowadays we have the highest possible form of social organization in the trade associations which represent the lumber business, and we believe that the chief reason why there are so many men still, who do not see as clearly as they might the advantage of being square at all times, is that the association movement has not yet reached its greatest development. Such men have not joined associations, or have not taken the interest in them that they should. They hold themselves apart for many reasons; some from definite preference desiring the freedom of action which is necessary to conduct their business upon a lower moral plane than the association upholds; some from ignorance of association ideals, and some from a haughty conception of their own greatness which they consider to be independent of all association assistance. There is not a man in the lumber business today who ought not to be giving his aid to trade association work. The measure of the success of the trade associations is a direct measure of the business morals of those who are its members. The trade association takes up for its members the work of promoting their individual welfare, and of lifting their individual business ideals by demonstrating to them continually that no business transaction can be a success if it is conducted by parties who show the intelligence all on one side and the honesty all on the other, instead of a good average of each for both parties.

What Should the Hemlock Price Be?

There was a time, not so very long ago, when the manufacturers of hemlock in Ontario were in dire straits on account of the severe competition which they had to meet from Wisconsin and Michigan hemlock, as well as from the products of the yellow pine mills of the south. Every meeting of hemlock men held in those days devoted much of its time to discussing this matter, and it seemed as though there was no possibility of improving the situation; yet in a comparatively short space of time this has been changed, and to-day this competition is of little or no importance, but the hemlock men still have their troubles.

The chief difficulty in connection with the hemlock trade to-day is the small manufacturer who wants money badly and cuts prices. Competition is from within the industry itself. These are the real facts as they were brought out at a meeting of hemlock manufacturers in Toronto recently. A canvas of those present at the meeting brought out a few salient points. In the first place the opinion was quite general that stocks of hemlock in the country to-day are exceptionally small. In the second place it was the equally unanimous opinion that it would be just as easy to-day to get $17 per thousand for number one at the mill as it would be to get $15 or $16, if it were not for those who, for one reason or another, are cutting prices.

The causes of price cutting were variously stated at the meeting. Some laid the chief blame upon the stocks of small mills, poorly manufactured and unsorted. A consumer of hemlock, a retailer or a wholesaler would often tell larger manufacturers that he was getting hemlock at a low price, and investigation would show that the stocks he was getting were of the small mill class, worth several dollars less than the assorted and well manufactured stocks of the larger mills. Others accounted for the unsteadiness of the market by saying that there was really very little demand for hemlock, or for any other line of lumber to-day, and that if a man wanted the hemlock he simply named his price and took it. The real reason is probably half way between these two. In the first place if there were any feasible way of rounding up the hemlock trade and getting it to hold steady for a better price, it is likely that a better price could be secured without much trouble. On the other hand, however, there is little trade to be had, as compared with former times. The problem seems to be one of balancing the supply against the demand. The demand is abnormally small, and, although stocks are below the average in quantity, they are still too great for the trade to absorb at such a price as $17, so long as there are mills ready to cut the prices.

All these conditions were very fully discussed by the hemlock men at their meeting, and in view of the small stocks now available they concluded without any hesitation that prices should not be less than they are at present, in fact that they should be both higher and steadier, and that those who have hemlock for sale should do what they can to bring about such a condition. The circumstances we have referred to above, however, seem at present to be too much for the mill men and they quite reasonably took into consideration the only natural remedy which they have in their power to apply, namely, to reduce their output. Several of those present expressed their intention, unless prices stiffened up, of taking no hemlock out of the woods during the coming fall. It will perhaps take a few months for such a step to have its permanent effect upon the market, but it seems to be a reasonable step. It is something of a pity, however, that the small amount of trade now to be had should not be done at a figure representing a little profit to the mill men. If all those who are interested in the hemlock market would only get together uniformly and ask for a figure corresponding to $17 at the mill, the benefit would probably be considerable.

The Canada Lumberman does not seek to impose its own views upon its readers in a matter like this, but would like to have some of those who are most closely interested in the hemlock situation send in their opinions.

Lumber Markets of the Argentine

The Canadian Trade Commissioner at Buenos Aires, Argentina, in a recent report says:—The stocks of lumber, according to reports, have become much depleted, but shipments are coming in slowly. The export of horses has led to a demand for pine, which is used in the construction of the fittings for steamers. Formerly, Oregon pine was used, but as stated in an earlier report, there is a strong prejudice against it in this market. Brazilian pine is at present being imported for this purpose, at the rate of about two million feet a month. On being asked the reason for not using Oregon pine or Douglas fir, as formerly, for these fittings, the firm which has practically all the contracts for fitting-out steamers, gave as their reason, that Pino Brazilero, as it is called locally, is cheaper, and in their opinion, better. It also would have the advantage of a much readier sale than Oregon pine, if owing to a cessation of the war, the trade in horses were suddenly to stop, and the firm were left with much timber on hand.

Reference has been made in various reports to the opportunities which the British Columbia lumber mills have, to extend their trade down the west coast of South America. It is entirely a matter of c.i.f. price at the various ports, but all things being equal, or even somewhat unequal, the mill with the best name will probably secure the business. In order to establish this trade, the British Columbia exporter has to consider three things, cost of timber at tide water, transport from port of shipment to port of entry, and financing.

The following extracts taken from a letter afford a very good indication of the position of the South American importer:—

"The exporters of the United States have no control over mills, and when we have dealt directly with a first-class lumber manufacturer as an experiment, the execution of our orders was such that we decided it was preferable to have a third party come between us and the mill-owner.

"Our purchases are made on a c.i.f. quotation, including Chilean consular charges at the United States port, for a given loading within a range of two or three months, on the basis of "G" list, and we provide the specification with about a month's anticipation of the loading.

"The specification usually consists of 10 per cent. to 15 per cent select, principally in 1-inch by 6-inch and some 1-inch by 8-inch, 10-inch and 12-inch, lengths 16 to 32 feet. The remainder is rough merchantable (without any No. 2 sic.) in current sizes, viz., 1½-inch by 6-inch, 8-inch, 10-inch and 12-inch; 2-inch by 3-inch, 4-inch, 6-inch, 8-inch, 10-inch and 12-inch; 3-inch by 3-inch, 4-inch, 6-inch, 8-inch, 10-inch and 12-inch; 4-inch by 4-inch, 6-inch, 8-inch, 10-inch and 12-inch; 6-inch by 6-inch, 8-inch, 10-inch and 12-inch; 8-inch by 8-inch, 10-inch and 12-inch; 10-inch by 10-inch and 12-inch; 12-inch by 12-inch; occasionally some 14-inch by 14-inch and 16-inch by 16-inch are required, and some of the 1½-inch is required select.

"The majority of the lengths are 16/32 feet with a percentage of 33/40 feet in the heavier sizes, which percentage generally increases with the size. The matter of lengths has lately been a source of trouble to us. In the 16/32 foot range there has been, within the last few years, an increasing tendency on the part of the shippers to supply an unreasonably large quantity of 16/20 feet, less than a fair proportion of 28/32 feet and a very small quantity of 22/26 feet. If you can remedy this defect by shipping fair proportions of these three groups, i.e., 16/20 feet, 22/26 feet and 28/32 feet within the group of 16/32 feet, we think you will go a long way towards overcoming our conservatism. We speak, naturally, on the understanding that other conditions would be the same. The quality must be good, and on this score we have seldom had to complain, so that you must bear in mind that this subject cannot be neglected in any way. The Americans have tried hard to get dealers here to accept a small percentage of a so-called No. 2 quality but without success. As Chile is a timber-producing country it necessarily manufactures a certain amount of inferior timber and this is quite enough for the market.

"Our arrangements for payment are that the shippers draw on us

at ninety days' sight for the c.i.f. value less the freight, attaching all the documents to the draft which is presented for our acceptance through one of the money foreign banks here. The documents are surrendered to us on acceptance and we pay the draft at maturity in bankers' bills on London drawn at ninety days' sight. The freight we pay direct to the vessel in conformity with the terms of the Charter-Party. These terms of payment, we may add, are almost general on this coast, not only in the pine trade but in nearly all others as well."

United States Production of Lumber

A revised report upon the production of lumber in the United States during 1913 has been issued by the United States Department of Agriculture. The bulletin contains reports from 21,394 mills which produced 38,387,009,000 board feet during 1913, as compared with 39,-158,414,000 feet reported by 29,648 mills in 1912.

The reported production of 4,592,055,000 feet in Washington in 1913 was the largest ever recorded for that State or any other State. The largest production previously reported by one State was that of 4,311,240,000 feet in 1890, by Michigan.

Of the total reported production of lumber, softwoods contributed 30,302,549,000 feet board measure in 1913, as against 30,526,416,000 feet in 1912, and 28,902,388,000 feet in 1911.

An analysis of production by classes of sawmills shows that mills having an annual production of less than 50,000 feet may be ignored in a comparative report. Such mills would probably not produce more than one-half of one per cent. of the total production. Mills producing 10,000,000 feet and over annually accounted for 60.5 per cent. of the total production and other mills accounted as follows:—5,000,-000 feet to 10,000,000 feet annual production 11.2 per cent. of the total; 1,000,000 feet to 5,000,000 feet annual production 16.5 per cent. of the total; 500,000 feet to 1,000,000 feet annual production 5.3 per cent. of the total; 50,000 feet to 500,000 feet annual production 6.5 per cent. of the total. It will be seen, therefore, that for purposes of comparison it is feasible to include in an annual report only those mills which produce 1,000,000 feet and upwards annually.

The production of yellow pine during 1913 amounted to 14,839,-363,000 feet, as compared with 14,737,052,000 feet during 1912, and 12,896,706,000 feet during 1911. Yellow pine was cut from a number of species growing east of the Rocky Mountains. The greatest production of yellow pine was in the State of Louisianna followed by Mississippi, Texas, North Carolina, Alabama, Arkansas, in the order mentioned.

Douglas fir yields more lumber annually than any other single species in the United States. The output during 1913 was 5,556,096,-000 feet as compared with 5,175,123,000 feet in 1912 and 5,054,243,000 feet in 1911. The greatest production was in Washington, amounting to 65.1 per cent. of the total production of Douglas fir. Oregon came next with 30.2 per cent., and the remainder was divided between California, Idaho, Montana and a number of other States, each producing a very small proportion.

The production of oak amounted to 3,211,718,000 feet during 1913, as compared with 3,318,952,000 feet in 1912 and 3,098,444,000 feet in 1911.

The production of white pine amounted to 2,568,686,000 feet during 1913 as compared with 3,138,277,000 feet during 1912 and 3,230,-584,000 feet during 1911.

Other classes of lumber, the production of which amounted to over 1,000,000,000 feet during 1913 were as follows:—Hemlock 2,319,-982,000 feet, Western pine, 1,258,528,000 feet; Cypress, 1,097,247,000 feet; Spruce, 1,046,816,000 feet.

Wood Waste Exchange Working Well

Since the inauguration of its Wood Waste Exchange, on April 15 last, the United States Forest Service has been requested to list 147 mills and factories as having waste material for sale, while during the same time 76 other wood-using concerns have asked to be listed as desiring to purchase waste of a wide range of species in specified dimensions, or as mill or factory run. The latter have been included in the list of "Opportunities to Sell Waste" which is sent monthly to concerns which have waste material for sale. This list is growing steadily, but the Forest Service is anxious to accelerate its rate of growth inasmuch as it comprises only about half as many buyers as there are sellers listed under "Opportunities to Buy Waste."

The Forest Service has just been notified by a large novelty manufacturing concern in New York City that the Wood Waste Exchange has enabled it to obtain its raw material at a considerable saving of money. This factory uses small, semi-finished blocks of dogwood which it makes into patent spool holders. The factory's requirements were published under "Opportunities to Sell Waste" and a manufacturer of shuttle blocks promptly seized the opportunity to dispose of the pieces of dogwood which previously were discarded as waste in his factory.

Similarly, other buyers are now, through the Wood Waste Exchange, obtaining material of good quality at a cost lower than they had been paying for raw material in the form of logs or standard lumber, and without themselves having to accumulate waste by cutting raw material into required sizes. On the other hand, many mills and factories which were burning their waste or disposing of it at firewood prices are now selling it at a fair profit.

The Forest Service seeks the co-operation of all manufacturers of small wooden commodities and invites them to list their requirements with the Wood Waste Exchange. There is no charge for this service. This is a striking instance of practical government assistance to industry, and one which might well be copied by the Canadian Forest Branch.

A Vancouver despatch states that lumber freights continue to show a steady advance. Balfour Guthrie & Company recently chartered the schooner Corona, from Puget Sound to Talara Bay, at 72s. 6d., and Comyn, Mackall & Company chartered Arago, from the North Pacific to Chile or Peru, at the same rate. For Australia, since May 17 to date, twenty-five sailing vessels have been taken by different shippers at rates varying from 70s., Sydney, and 80s. Melbourne, by advances of 2s. 6d. per thousand, up to 82s. 6d., Sydney, and 92s. 6d. Melbourne, and some vessels have been chartered as far as May and June, 1916, at a reduction in rates of about 5s. from those paid for the same vessels for this year's loading.

At a meeting of the executive committee of the Canadian Pulp and Paper Manufacturers' Association held in Montreal recently, at which five members were present, it was decided to contribute five machine guns to the Government, each man present contributing one gun. Efforts are to be made by the association to raise among the members a sufficient sum to enable them to make a further contribution of fifteen guns.

At a recent meeting of the North Shore Lumbermen's Association of Ontario, held at Sudbury, a resolution was unanimously passed petitioning the License Commissioners to cancel all shop licenses in the districts affected by lumbering operations.

The Norwegian barque Kotka, which was reported to have been sunk about June 30th, off Fastnet Island, by gun fire from a German submarine, has been discovered still afloat. Her crew took to the life boats and were landed at Queenstown.

The Readers Viewpoint on Trade Topics

Interesting Description of Australian Markets—Canadian Hardwood Grading Customs Discussed

Articles or letters to the Editor of the Canada Lumberman, dealing with trade conditions, or discussing questions of interest to manufacturers, wholesalers or retailers of lumber are always welcomed by our readers. Here are a few that have been received lately:—

The Timber Markets of Australia

Editor Canada Lumberman:— South Melbourne, Australia.

In compliance with your request we have much pleasure in giving you the following information regarding the lumber trade between Australia and the Pacific Coast of North America:—

As regards shipping facilities from here and Canada, there is, as you will probably understand, a direct line of steamers, run by the New Zealand Shipping Company. This is known as the Eastern Canadian Steam Service to Australia and New Zealand, and the Canadian office, we understand, is situated at 213 Board of Trade Buildings, Montreal. This line runs a monthly service and by it we have had large shipments of spruce deals. The same company, of course, bring general cargo from the United States and other ports in Canada.

Australian imports from America include:—Canadian white pine.—This timber has never been imported to any very large extent, so far as we know. It is somewhat similar to "Michigan clear pine," which latter is obtainable clear of knots and therefore is preferred. If Canadian white pine, clear of knots, could be obtained, and at a reasonable price, also in large quantities, there should be no reason why considerable business could not be done.

From Norway and Sweden we get our floorings, linings, weatherboards and red deals.

From the Pacific slope of America,—Oregon redwood and western white pine.

From Canada,—Spruce.

From New York side,—Oak, ash, walnut, Michigan clear pine, pitch pine, etc.

From Japan,—Oak, ash and pine (from the Island of Yezzo).

From the Pacific slope side, there are no direct liners to Melbourne, and, as a result, the business is done mainly through commission houses in San Francisco, some of whom have branch offices throughout Australia or agents here, the whole being arranged on a C.I.F.E. basis. The commission people usually charter steamer on time, sending forward shipments for several consignees in the one bottom. Since the war broke out, however, steamers have dropped practically out of the market and sailers now are bringing cargoes, which are still being sold on a C.I.F.E. basis.

So far as our own conditions are concerned, we have quite a variety of timbers, and, for your information, may say that the productions of the various States are as follows:—

Western Australia.—Here there are large supplies of jarrah, a hardwood which is exported to India, South Africa and Europe for paving blocks, railroad work and scantlings, whilst offcuts (building sizes) are sent to the various States of Australia. This is the prime timber obtainable in the west, and there are very large quantities grown there.

South Australia is absolutely devoid of any commercial timber.

Victoria's principal timber is hardwood, which is used for the cheaper frame-work in houses.

New South Wales and Queensland have some of the finest hardwoods and fancy timbers obtainable in any part of the world. The hardwoods are yellow wood, iron bark and spotted gum, which are all exported for railway truck building for Europe, the offcuts in building sizes being used locally. The cabinet-making or fancy timbers are hoop and colonial pine, cedar, silky oak, rosewood, walnut, colonial beech, maple, blackbean and boligum.

New Zealand is principally known for its kauri, white pine and rimu, the first mentioned being a high class quality timber used extensively for cabinet-making and body building, white pine being principally used for case-making and rimu for flooring.

Tasmania has hardwoods similar to those in Victoria, and supplies a very large quantity for scantlings, floorings and weatherboards. It also has large supplies of blackwood and huon pine, which are used extensively for cabinet-making, body building and other similar work.

The forests of Australasia are not very extensive, being the fourth lowest of any country in the world, and only about five per cent. of the whole of our area contains forests.

Our coinage system is exactly the same as that of England, whilst exchange is based on London, business being done on sight drafts; 60 days drafts or 90 days drafts, as may be arranged.—James Moore & Sons Ppty., Ltd.

Opportunities for Canadian Trade in Grenada

Editor Canada Lumberman:— St. George's, Grenada, B.W.I.

The principal grades of lumber imported into Grenada are white and pitch pine, the former coming exclusively from Canada and the latter from United States Gulf ports. Nova Scotia supplies the bulk of the white pine.

Owing to the ravages of wood ants, pitch pine is used wherever possible and such woods as spruce and hemlock are practically useless for building purposes on account of these pests; spruce being only imported for boat building. While very little, if any, dressed or planed boards are imported from Canada, we use a great deal of planed pitch pine boards for floorings and ceilings. There are no local sawmills here and consequently this class of lumber is imported.

Since the opening of the Panama Canal, several firms have communicated with us re Douglas fir taking the place of pitch pine, but as it is not known here, we doubt if any importer would care to risk a cargo, even if the freight could be arranged. When times are again normal, we have no doubt steamers from the Pacific Coast will make Trinidad one of their ports of call and, being quite close, trans-shipment of small trial lots destined for this island could be easily arranged.

It is all a question of price and quality and, of course, Douglas fir of Canadian origin would have the preference provided it is suitable for local requirement.—Thomson Hankey & Company.

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Cannot Sell Hardwoods on Grade in England

Editor Canada Lumberman:— Montreal, vue., July 21st.

In my limited experience I have as yet been unable to sell on grade to Great Britain. This refers particularly to hardwood. I have just recently, after a great deal of difficulty in prevailing my views upon the exporter, shipped two small parcels of 2-in. birch, one of which contained almost 70 per cent. No. 1 common and better by actual tally, and the other only 40 per cent., and I succeeded in getting $3.00 per M. more for the first parcel than for the second parcel. Anyone would see that the difference should have been very much greater. This as yet, has failed to convince my friends that they should buy on grade and I give it as my opinion that in dealing with Canada, British importers are content to specify mill run and are satisfied, provided they do not get anything worse than mill run, without concerning themselves as to how good that mill run is—that is, the percentage of the different grades better than mill cull making up the mill run. An English importer recently gave me the impression that Canadians have no grading rules and consequently could not sell on grade as Americans do.—C. A. Spencer.

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Canadians Aggressive in Export Trade

Editor Canada Lumberman:— Halifax, N.S., July 8th.

With reference to Mr. C. T. White's criticism of Canadian exporters; with my knowledge of the trade I can hardly agree with Mr. White's views. My answer to the first question (whether Canadians have fallen down in marketing their export lumber) would be emphatically, "No."

With regard to the first part of Mr. White's letter, I do not think for a moment that any embargo is placed on special quality in either hardwood or spruce. It is well known that the Quebec shippers classify and sort their hardwood into different qualities, and I understand that first quality Quebec is desired and demanded for aeroplanes.

With regard to hardwood, I know that the different grades shipped from Quebec, and also via St. John, are used for both furniture and piano manufacturing.

If Mr. White knows of any specific instance of an embargo being placed on either of the woods he mentions, I wish he would give us the benefit of his knowledge. Of course, there is a large quantity of hardwood shipped from the Southern States, and they do grade their hardwood very particularly, and make good money out of doing so, and no doubt there is lots of room for Canadian exporters to obtain more of this business for special qualities than they do at present.

With regard to shipment through the ports of Portland and Boston; this, of course, must refer practically only to the winter season, and I do not think it is done simply, as Mr. White says, "because it is known that if such stock were shipped from any port of Canada, buyers would be prejudiced against it."

I am quite sure that any manufacturer or exporter on the other side would give Canadian exporters every preference in the matter of using wood.

I quite agree with Mr. White's last remark with regard to shipping Canadian stock via the United States, in order to sell it in Great Britain, but I do not think the situation is as bad as he makes out, and I quite agree with him that our stocks are good enough to sell on their own merits.—Colin C. Tyrer.

Lumber Grades Becoming Staple as Wheat Grades

Editor Canada Lumberman:— Huntingburg, Ind., July 16th.

I have read over the letter on grading hardwood, published in the Canada Lumberman a short time ago. Our friend seems to be a sort of cross affair. They hand it to him one way up in Canada, and another down in the States, and he seems to complain on account of the Canadian manufacturer requiring the National inspection made at the time of loading, and that such inspection is final. It is between buyer and seller, but if the lumber under this inspection is not found up to standard of the grade specified, a reinspection can be had by the Surveyor General and there is no danger, as I take it, of the buyer being forced to pay for more lumber than he actually gets, or more value than he actually gets, and the time of loading the lumber is certainly the time it should be inspected under all circumstances, if shipped under National certificate, for then the buyer has a financial interest in the matter, and will be duly cared for and protected during the interval you are waiting for a reinspection, in case the original inspection is not found satisfactory. Also, because in so many instances the car would have to be unloaded in waiting for an original inspection, or the shipment being under charge of Car Service for sometimes a good many days, just as it frequently takes several days to get an inspector to a mill that is not located where there is a licensed inspector also located, and much of the time there is great delay either in the markets where there are a number of licensed inspectors working continually, for at times lumber is moving more rapidly than other times, and a maximum force cannot be always retained at the heavy expense at times when there is a minimum amount of business being done.

I have never suffered from the trouble considered by your correspondent. I have never found any serious trouble arising from loose grades in the Canadian territory, and have very seldom sold a carload of lumber on mixed grades of the same kind in the same car to anyone going into that territory. I have not found any noticeable difference in the grades required in the two sides of the border today. I do find some few people who seem to be in position to use loose grades of lumber, but I find in every instance the lumber is all at a price corresponding, and I have not attempted to question the judgment or sanity of the buyer or the seller in either instanse. But I also find that the country is practically coming to the basis of a standardization of grade in demands and that a man necessarily must ship about the same grade of lumber to all the larger concerns in the country.

It is true, beyond a doubt, that you will find people selling occasionally lumber from one territory at less than it can be had from another territory, and you will find the so-called same grade of lumber sold by different people from the same locality at entirely different prices. There are some shippers who get an extraordinary price and give an extraordinary grade, making a grade higher than that set out in the National Association rules book, but in all instances getting the prices to correspond. This sort of lumber quickly appeals to people who from the size or length of the cuttings required in their work, must necessarily find an extraordinary grade of lumber better up to their requirements than anything else.

I have been in the lumber game for a great many years and have watched the development in every city in the United States of any considerable size or that has represented any considerable type of lumber in abstract, with its long system of doing business; its long rules for grading and measuring the lumber, and in some instances rules adopted and enforced by State enactments, when the rules from New York to St. Louis on a single grade sometimes differed almost as much as the difference today between two different grades. To-day there is very nearly, in fact, a standardization of grades in all lumber, not only in North America, but the world over.

It seems to me, then, that there has been wonderful progress in this direction in the last few years, and I believe that the matter will work out in a few years to where the grade of lumber will be as staple as the grade of wheat. —J. V. Stimson.

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The Customer and the Grades

Editor Canada Lumberman:—

We have yours of July 14th, enclosing a proof of letter signed U. S. Wholesaler, and asking us for an expression in regard to the matter. So far as the shipments from Canadian mills are concerned, we should think if the Canadian mills were willing to sell their goods on National Inspection, they should be wililng to abide by a National Certificate at destination, inasmuch as it would be a great expense to send a National inspector probably to their mills, unless there were a number of cars to be shipped out at the same time, so as to bring the average expense down, but we do not see what is to be gained by reprimanding them for not doing so. The lumber belongs to them. If they want to sell it in accordance with these rules they can do so. If they do not, they have the privilege of keeping it, which apparently they are willing to do.

We note the other matters discussed by the U. S. Wholesaler. We feel, when a man buys a certain grade of lumber, he is entitled to get what he buys, and a wholesaler or manufacturer who sells him should make his quotations accordingly.

There is one thing in connection with the manufacture and shipment of hardwoods, that nobody can control by rules or anything else—that is, the fact that some timber is richer than others and vice versa—some timber is poorer than others. We have known cases where a dealer purchased lumber from a manufacturer who had particularly rich timber, but who afterwards bought the same grade from another manufacturer who conscientiously put up his lumber according to the grading rules. When the car reached destination and was compared with what the one manufacturer had shipped, he gathered the impression that is was an inferior grade, although it was fully up to the grade. The one man could not make lumber as good as the other man because it was not in the trees, and he was condemned accordingly; whereas, the man who had the rich timber never got any particular praise for shipping grades that were fine and choice, and he could not help himself if he wanted. He had to ship fine grades. Of course, the moral of this is, where a purchaser finds that a certain mill makes particularly fine grades, it is a mighty wise thing on his part to stick to that mill and not go shopping around. That is pretty hard on the other fellow who wants business, but a great many good merchants act on this principle, and yet, even that man who has the fine timber will sometimes find that he has trouble with his own shipments, because that timber will vary sometimes.

We have an instance before us of this kind right now. We sold a man a car of yellow pine boards about three months ago. We shipped it from a mill that we knew had a choice growth of timber. The man was very greatly pleased, and he did not hesitate to express his gratification of the quality. He gave our representative his order for another car, and the same grade was shipped from the same mill, but it came out of a different cutting of timber. Both cars proved to be above the average in grade and quality, but the exceptionally high quality of the first car led the customer to be disappointed with the material on the second car.

The moral appears to be that you can make standard grades, but you cannot make standard lumber. By that we mean that you can make a rule that will specify the most coarse boards that will go into the grade specified, but it is absolutely impossible to make every car of the same grade of lumber exactly alike for quality, even if it comes from the same lumber. It is bound to vary according to the class of timber on which the mill is cutting at the time the lumber is manufactured.—Wistar, Underhill & Nixon.

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The Consumer's Interests a Large Factor

Editor Canada Lumberman:— Pittsburgh, Pa., July 21st.

We read the letter published recently in the Canada Lumberman regarding the hardwood situation in Canada. Our experience with Canadian trade, with the exception of two or three accounts, has been with the yards, and we found them very exacting in the grade, but they are willing to stand National Hardwood Lumber Association rules. We have not shipped however, diversified line, and have not catered to all the trade.

The trouble set forth in the letter of the U. S. Wholesaler is the same trouble which we have in the United States. There is a question in our minds as to whether the consuming trade would accept a standard grade rule, particularly if the proposed change in rules is put into effect—making a select grade in oak, chestnut and similar woods. A manufacturer has many different sizes to get out of a given piece of lumber and if he keeps up with the trend of times, he has to change his patterns frequently. A broader grade, would be, we consider, much better for this class of trade. Our idea with the yard trade is practically the same. A retail hardwood dealer keeps a stock to supply his customers with what they want, which he can do if he has a pretty good grade to pick from.

However, we are of the opinion that if everybody who consumes hardwood could arrange their business in such a way that standard grades could be used without any extra, everything could be worked out very nicely. We doubt the feasibility of this very much, however.

Relative to the question of mixed cars—we do not expect in every case, neither are we willing to censure any seller of lumber if we do not get orders on all the quotations we make, particularly at a great distance. It is the salesman who is on to the job, who has his friends, that can sell what the customer wants, that is entitled to the order.

There is another side to this grade business. That is, there are numerous mills putting out a grade of lumber which is far above the National rules. If these mills elect to make such a grade and the wholesaler cares to order from such mills a certain percentage of what these mills or shippers call No. 1 common with other 1s and 2s, there should be no complaint from the buyer so long as he gets National rules of inspection on the lumber and it comes up to invoice. Very few of these shippers sell direct to the trade and there are few complaints from wholesalers.—E. H. Shreiner Lumber Company.

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The Only Fair Method

Editor Canada Lumberman: Parkersburg, W. Va., July 21st.

We have read the letter which was recently published in the Canada Lumberman, signed by "U. S. Wholesaler," and we surely are in accord with anything which would be of interest to either the lumbermen in Canada or the United States. We find a great deal of this grade mixing going on, especially among the Canadian purchasers. We have always been willing, on any lumber that we ship to Canada or any other point, if the grade is not satisfactory to our customer, to have it adjusted by a National Inspector, and we believe this is the only fair way to deal with cases of this kind.—W. S. Mercereau Lumber Company.

Grade Mixing Not Necessary

Editor Canada Lumberman: Williamsport, Pa., July 21st.

We accept orders, make shipments and have our hardwood inspectors educated according to National Hardwood Lumber Association rules. We appreciate the fact that there is a great deal of mixing grades, which we consider unnecessary to meet competition, but is rather the result of poor salesmanship and very often is quite unsatisfactory for the consumer after he receives his lumber.

We know of case after case where we failed to secure business from a factory at our regular prices, and ultimately we received the order from another party with instructions to load part of the shipment from grade originally requested, and include from 10 per cent. to 40 per cent. of the next lower grade well mixed through the car. While this sort of business does not appeal to us, we do it for the second and third party in preference to accepting low priced orders and then ship off-grades to make up the difference. Of course, where we follow this plan we sell the entire grade, that is, we will sell two cars of No. 1 common and better and ship the first and seconds and a percentage of the No. 1 common in with the first and seconds, then load the remainder of the No. 1 common in another car, provided the order reads in that way. On a deal of this kind, the factory receives an inferior grade on both cars, but we consider that is no fault of ours, as we are receiving full price for our lumber and have made shipment in a manner for which we can call on the Association for protection in case of trouble, and we figure we are not responsible for the factory end of the poor deal.—Central Pennsylvania Lumber Company.

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Mixing Grades Demoralizes Trade

Editor Canada Lumberman: Camden, N. J.

We thoroughly agree with the article written in the Canada Lumberman by U. S. Wholesaler.

It has always been our policy to ship absolutely standard National Hardwood grades, and we will not even accept orders from other wholesalers to mix in a proportion of lower grades.

We see nothing to criticize in the article. Our experience has been somewhat similar. We are buying, and will be for quite a long time, 16/4—1 and 2 birch, and are willing to take a certain percentage of No. 1 common. We buy it on National Hardwood rules. We have no trouble except with Canadian stock, and from some sections they will ship us in stock (after agreeing on National inspection, and for all 1s and 2s) and will not even send an invoice, and in other cases invoice as 1s and 2s, and ship in thin lumber, and more common and culls than anything else.

We are very much interested in getting in touch with mills in Canada, whom we can depend upon to give us 16/4 birch, strictly on National Hardwood rules, largely 1s and 2s. We will take some No. 1 common, but we prefer that they load the No. 1 common separately in the car, as we are not mixing grades on our customer.

We will be glad to have you publish this article, or any portion of it, using our name, as we think you are doing a fine work. We think you and anyone else, who will help to standardize grades are doing a fine work, beneficial for the entire trade. Manufacturers could break this practice up, if they would absolutely refuse to sell and ship anything but standard grades, no matter how the party ordered it. If the party wants more than one grade in the car, all well and good, but let them separate it in loading and mark with strips. The manufacturer is really helping to demoralize the price of lumber when he is willing to help a wholesaler to carry out a dishonest scheme, by mixing grades.—Hadentine Lumber Company, Inc.

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Finds Trouble in Canadian Trade

Editor Canada Lumberman:— Saginaw, Mich., July 16th.

We have gone up against this same grading thing here in Saginaw. The past three years we have had a man travelling in Canada, and find a great many instances where we are unable to get the business, simply because we will not put in 20 to 35 per cent. of No. 1 Common grade with the 1st and 2nds.

Just as soon as they have more National Hardwood lumber inspectors in Canada the consumer will be getting a better grade of lumber, and the better lot of lumber manufacturers and dealers on this side will be able to sell more of their product in Canada.

We would like to have you send us your paper. We buy considerable lumber in Canada, and have at the present time an inspector over there picking up hardwood. We would not have had to go to this expense if there were National inspectors in Canada that we could employ.

Don't forget that we want to subscribe for your paper, and send it on to us immediately.—Strable Lumber & Salt Company.

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The Personal Element All-Important

Editor Canada Lumberman:— Nashville, Tenn., July 17.

Your wholesale friend is now bringing before you a proposition that has been gone over in the United States several times by the trade papers, also the associations and lumbermen generally, with no doubt some general good, but without accomplishing any particular reform at the time.

We think that the idea this letter conveys, applying it to our experience in selling the Canadian buyers of hardwood, really goes beyond the true measure of conditions. Personally, we find conditions just about the same in Canada as we find them here. We do not see any difference.

We feel sure that a large part of the buyers of southern hardwood in Canada are thoroughly competent in their judgment of the grades and value of lumber; quite so. There does exist a wide variation in the ability of men, in the conditions under which their business is conducted, in the competition they have to meet, and a great many other perfectly natural conditions, that bear directly upon this lumber business, or any other business for that matter, that will always create these different conditions.

We speak of a National Inspection as conducted by the National Association as being the standard basis of our grades; yet the Bonded Association Inspectors develop differences among themselves in grading lumber, at times, to a considerable extent.

We personally believe that these conditions in the lumber business will only be corrected as far as possible by a very slow natural process of education largely from one's personal experience in the business, meeting the conditions of competition, etc. It has been the controlling feature through the past in building up the lumber business to the present basis beyond question.—Hunt, Washington & Smith.

* * *

Canadian Trade Receiving and Giving Good Grades

Editor Canada Lumberman.—A United States wholesaler recently had a letter in your columns regarding inspection by Canadian mills, and also regarding the inspection as accepted by Canadian consumers. We do a good deal of business in Canada, and it is our opinion that the great portion of the consumers in Canada are getting a good grade of lumber and know a good grade when they get it.

We do not buy a great deal of lumber in Canada, but occasionally have bought some birch and maple from Canadian shippers. The grades we have received from them have been satisfactory and we have not had any trouble. All of the foreign markets that we know of, accept Kentucky and Tennessee oak as northern oak, as it is of soft texture, and we do not believe the point that your correspondent makes about the southern wood is well taken. What most people consider southern oak is stock from Mississippi or Louisiana, where it is very hard in texture. When a man orders northern oak he generally means that he wants soft stock.

We do not think the grading question is any more serious in Canada than it is in the United States, or any other place. There will always be some differences coming up between the buyer and the seller.

We believe that the people in Canada are able to take care of themselves, and that they are doing it.—U. S. Manufacturer.

* * *

Hardwood Inspectors—A Suggested Reform

Editor Canada Lumberman.—The writer has had an eye on the inspection of hardwood lumber in the United States and Canada for over twenty years, and in the course of that time has seen a great many important changes. Since the organization of the National Hardwood Lumber Association, whose membership consists of manufacturers, consumers, middlemen, importers, exporters, etc., all on the same basis, no trouble or expense has been spared in working out a set of rules to conform as closely as possible to the requirements of everybody concerned, so as to deal justly and equitably with buyer and seller alike. The National Rules are now as standard in the markets of the world as Webster's Dictionary is in the public schools.

After these rules had been worked out it was of great importance that means should be adopted for having them properly applied. There is nothing so important to the trade as the inspection and measurement of lumber. The inspector is counting the dollars and cents that must change hands in the deal. He must be a man of practical experience and honest from A to Z. Parties who have lumber to sell naturally would not like to say "we don't want your inspector to come and take up our stock." This is just as natural an objection as that of a dealer to accept the inspection of the mill man. As a consequence, the lumber inspector has been developed along professional lines. These inspectors are just as essential to-day as doctors or tailors, and, making use of the National Rules, they ensure that the lumberman shall obtain what he pays for and pay for what he obtains.

Only members of the National Hardwood Lumber Association can demand a National Inspection. However, the majority of lumber sold in Canada is measured in accordance with its rules, and "personal" certificates are issued based upon these rules. In such cases the matter of inspection is just the same, or should be, as if National certificates were issued. I do not care to appear as dictating to the N. H. L. A., or even as making suggestions, yet I feel that if they would issue a license to every man who is qualified to inspect according to their rules, and would cancel his license as soon as they found a man disqualified, and prohibit the use of their rules by any man not so licensed, we would have better inspection, more, and better inspectors, and there would be more firms represented in the association to-day.—A Spectator.

The Norwegian steamer Bellgrade from Halifax to Sharpness with a cargo of timber was towed into Milford Haven recently, after having been torpedoed.

Why Should This Order Not Come to Canada?

New York, July 22.—Negotiations likely to be concluded within the next few days will probably bring to Brooklyn the most unusual, as well as one of the biggest, of war orders. A contract for the construction of 20,000 portable houses, to be used in Belgium and northern France, is involved, and aggregates many millions of dollars. The British Government has figured as the purchasing agent thus far in the transaction.

The plan responsible for this tremendous order, said to be the largest single contract ever given for buildings of the portable type, calls for the furnishing of structures suitable for dwellings, churches, schools and business buildings. Entire cities and towns are to be created from them to house the refugees made homeless by the high tide of the German advance in France. Shipment of the buildings is expected to be completed by winter.

It is believed Great Britain, France and Belgium are acting jointly and that Britain is representing the other countries in the negotiations.

Why is this contract not given in Canada? Are Canadians unable to turn out 20,000 portable houses; or have they not been sufficiently wide awake to let the Governments of Great Britain and Europe know that they can handle the business? We do not know who is responsible, or whether anyone at all is responsible; for it may be that the press despatch reproduced above is untrue. A few days ought to bring out the real facts of the case.

Assuming that such an order is being placed, or that the British and European Governments are in the market for this large quantity of portable houses, what is our position in Canada? We have the workmen and the equipment for turning the lumber into the proper sizes and shapes, and for assembling it to whatever extent is necessary. We have everything necessary for filling the order in record time. We have also at Ottawa a Department of Trade and Commerce whose duty it is to see that such an order comes in its entirety to Canada, if it is within the bounds of possibility to do so.

There ought to be no question of price about this. Under present conditions we can produce the houses as cheaply as any United States manufacturers, for we have the cheap material, and labor that is as skilled as that to be had in the United States. An order of this nature would be the means of reviving the lumber and woodworking industry in many parts of Canada. It would, in fact, put the industry practically on its feet.

We would like to hear from readers of the Canada Lumberman what they think about this matter. Do they know of any reason why Canadians cannot fill this order and many others like it in record time if necessary; and to what extent do they consider that such an order would be instrumental in bringing prosperity to the lumbering and woodworking industry?

German Prize to Carry Lumber

Another result of the efforts made by the British Columbia Government on behalf of the lumber industry is announced by the Minister of Lands, the British Admiralty having agreed to turn over to the British Columbia Government, for one voyage from the B. C. coast to the United Kingdom, the steamer "Grahamland" now at the Falkland Islands. The "Grahamland" has an interesting history, having been, until the destruction of Admiral von Spee's squadron, the German collier "Josephena," when she surrendered to one of the British warships.

The ship was offered through the Agent-General, to the British Columbia Government for the transport of a lumber cargo to the United Kingdom, not necessarily for Admiralty purposes, and this being so, all timber shippers were notified and asked to make offers for the vessel, the amount of the charter being £6,600. The bid of the Cameron Lumber Company, of Victoria, was accepted, and the "Grahamland" is expected to arrive for August loading. Her capacity is given as 550 standards equal to 1,100 feet, and the securing of such a vessel at a time when tonnage is scarce, by a B. C. firm even at such a high figure is a matter for congratulation. It is hoped that the "Grahamland" will not be the last of the captured or interned German ships to be utilized in the lumber-carrying trade from B. C.

Toronto Lumbermen Discuss Trade Ethics

The Lumbermen's Section of the Toronto Board of Trade held an interesting meeting on July 23rd at which a lengthy discussion took place in regard to a motion introduced by Mr. Hugh A. Rose, seconded by Mr. A. E. Gordon, that a committee should be appointed to prepare a list of retail lumber dealers in Toronto, and others, who are entitled to buy lumber in carload lots from wholesalers or manufacturers. Opinions were expressed both pro and con in connection with the feasibility of such a plan. The matter had come up on account of a transaction which recently took place between a Toronto wholesaler and a customer, who was classed by some retailers and wholesalers as a contractor and by others as a retailer. The object of the discussion was to bring out the views of members present in regard to who was a legitimate customer for the wholesale dealer. The discussion was prolonged and practical. The gist of the opinion of those who opposed the motion was that it would be an extremely difficult matter to draw up such a list on account of the varying opinions of the different members of the trade. Those who favored the motion thought that it would be possible to prepare a list of retail customers to whom wholesalers would be able to sell without any question as to the propriety of such business, and that the matter could be safely left in their hands without stipulating definitely that their business should be proscribed absolutely to such limits. The discussion was adjourned till the next meeting.

Another subject discussed was a report that an order for 20,000 portable houses was about to be placed in New York by British and European governments, the buildings to be used in Belgium and France. It was decided that the secretary should write to the Dominion Commissioner of Commerce at Ottawa and draw his attention to this matter, urging him to take such steps as are necessary to try to have such orders diverted to Canadian firms, as they are in a good position to furnish the goods.

Lumbermen Discuss Motor Trucks

The Lumbermen's Section of the Toronto Board of Trade held an interesting meeting recently at which Mr. L. F. Strickland, of the Canada Lumber Company, gave an account of his experiences in connection with the use of a motor truck for delivery purposes, making comparisons with the use of horses. Mr. Strickland stated that he had kept a careful account of the costs of truck delivery and had been convinced that for long hauls a truck was unquestionably a paying proposition when it was loaded to capacity. There was no advantage in a truck for short hauls, as the cost of handling and the amount of time which handling occupied made the actual cost of delivery on a short haul higher than that of delivery by horses. The essence of success in the use of trucks was speed. They enabled a firm to make deliveries over a very wide range of territory. It was important in using trucks to adopt every practical method of reducing costs. One important way of attaining this end was to provide special arrangements for facilitating loading and unloading operations. Mr. Strickland described very successful facilities of this class which had been installed by important companies in Chicago.

A few years ago the truck proposition had been looked upon with considerable doubt by the retail lumbermen, but it was to-day being adopted in all parts of the country. An important factor leading to this result was that when a truck was not operating it could be placed in a garage and its up-keep expense stopped. Horses, however, had to be fed all the time. In using horses one had to figure on 365 days in the year, on account of the cost of feeding, whereas with trucks it was necessary only to figure on about 318 days in the year. The operating costs in connection with the Canada Lumber Company's truck figured out at about $2,500 a year.

After Mr. Strickland's address several other members who are using trucks expressed their views in connection with the subject, each agreeing with Mr. Strickland as to the efficiency and economy of truck delivery for long hauls. Mr. G. W. Boake stated that the cost of operating a truck in connection with his business figured out about equal to hiring teams of horses at $4 per day.

Lumberjack is War Hero

Private Vincent, a lumberjack from Bracebridge, Ont., figures prominently in the reports made by the official eye witness of the British Government in the western theatre of war, Sir Max Aitken. The report reached Ottawa, Ont., July 13. Vincent belongs to the First Ontario Battalion, which was all but wiped out in action on June 15 near La Bassee, in northern France. The report says:—"A machine gun crew, which reached the trench, was reduced to Lieutenant Campbell and Private Vincent, the machine gun and the tripod. In default of a base Lieutenant Campbell set up the machine gun on the broad back of Private Vincent and fired continuously. Afterward, during the retreat, German bombers entered the trench, and Lieutenant Campbell fell wounded. Private Vincent then cut away the cartridge belt and, abandoning the tripod, dragged the gun away to safety because it was too hot to handle."

Aubrey White, C.M.G., Passes Away

Death of Ontario's Deputy Minister of Lands and Forests —Over 25 Years in Charge of Provincial Forests

The late Aubrey White, C.M.G.

Mr. Aubrey White, C.M.G., Deputy Minister of Lands and Forests for the province of Ontario, died at his summer residence, St. Elmo, Lake Muskoka, on July 13th. Death came very suddenly, Mr. White having been apparently in good health. Part of the day of his death he had spent fishing, but at night he was seized with apoplexy and died shortly afterwards. The late Mr. White, who was 70 years of age, had not been in ailing health, although when he left for his annual vacation in June he admitted being a little fagged out. He seemed to benefit from the rest however, and his sudden death was a great shock to his wide circle of friends.

The late Mr. White had occupied the position of Deputy Minister of Lands and Forests of the province of Ontario for more than a quarter of a century. When he was appointed to the office in 1887, it was with the title of assistant commissioner of Crown Lands. Subsequently the title was changed, but the work was the same. Aubrey White was born at Omagh, County Tyrone, Ireland, on March 19th, 1845. He was the son of David W. White, and was educated at the Royal School, Raphoe, and at the Royal School, Dungannon, and "Dunbars," Ireland. From the first he had a predilection for public service, although his first attempt was a humble one. He was a cadet in the Royal Navy but failed in his examinations. Nothing daunted, he enlisted as a private in the army, attached to the 8th Regiment. He did his time in the ranks and, when the Trent affair came along, received with joy the announcement that the regiment had been ordered to Canada. It almost seemed to him that destiny had been calling him. Unfortunately however, the 8th did not make the trip; and young White, determined to see the new world bought his way out of the army and started for Canada in 1862.

Upon his arrival in Canada he made his way to the Muskoka district and there the future Deputy Minister received at first hand the hard training that gave him sympathy and understanding for his future work. For several years he lived out-of-doors among lumbermen, trappers, and Indians. Muskoka at that time was almost an undeveloped country and there was no railroad beyond Barrie. In that new region, young White tramped, hunted, and worked. He was an enthusiastic lumberman and became an estimator of timber. Cruising naturally lead to forest ranging and for three years he was a forest ranger—good training for a man who was afterwards to be the father of the fire ranging service of Ontario and to have so much to do with the administration of the fire ranging service.

During six years of his life in the north Mr. White was in the employ of the Georgian Bay Lumber Company in charge of its limits, lands and timber in the Muskoka and Parry Sound district. In every transaction having to do with the sale or purchase of timber the company depended entirely upon Mr. White's advice and the results were uniformly satisfactory.

About 1876 the Georgian Bay Lumber Company curtailed its operations by half, making it necessary for the young bushman to secure a new market for his abilities. In 1878 he was appointed Crown Land agent at Bracebridge. In 1882 he became clerk of the woods and forests branch of the Crown Lands Department of Ontario, with charge of lumbering operations. In 1887 he was made assistant commissioner of Crown Lands, the office now known as that of Deputy Minister of Lands and Forests.

Since 1887 there have been many Ministers in charge of this Department, most of them men of outstanding distinction and ability. To these Mr. White was a valuable assistant. In his contact with the public, in his relations with the Ministers, in his dealings with employees of the Department—in every way he created the impression of a kindly man of deliberate, intellignt judgment.

In 1885 Mr. White, then clerk of the Woods and Forests Branch of the Crown Lands Department, addressed a memorandum to the Commissioner of Crown Lands drawing attention to the great destruction of the timber yield of the province by fire. "I would therefore suggest," Mr. White wrote, "that during the dangerous period of each year a certain number of men, to be called fire rangers, shall be stationed at points in the licensed and unlicensed lands of the province, where, from settlement, railway construction, lumbering or any other cause fire is so frequently used as to be a source of danger." Out of this memorandum has grown Ontario's extensive fire ranging service of to-day, employing in the neighborhood of 1,000 men under provincial supervision.

Mr. White had the distinction of being included in the honor list of titles and distinctions granted by King George on New Years' Day, 1914. He was made Companion of the Most Distinguished Order of St. Michael and St. George.

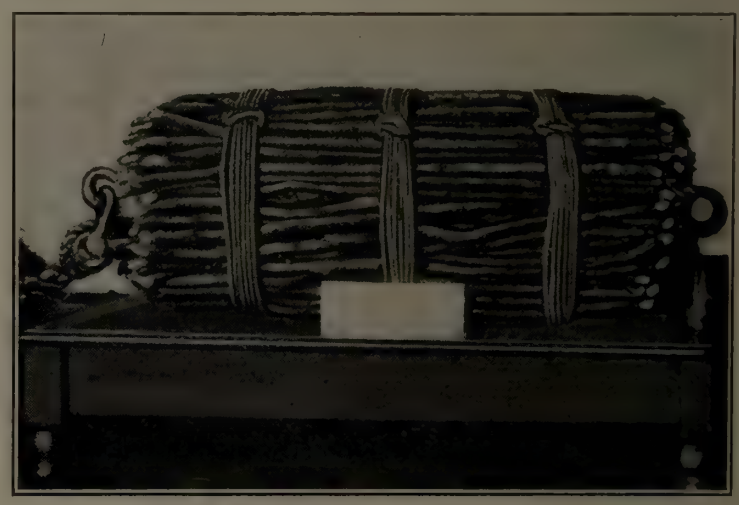
In 1900 Mr. Aubrey White represented the province of Ontario at the Paris Exposition. In 1904 he was appointed a member of the Committee of Five for the delimination of the Temiskaming Railway lands and the selection of town sites therein.

Mr. Aubrey White had two hobbies. One was forestry and the other masonry, and in both he obtained high distinction. He was an authority on forestry and was one of the fathers of forestry and forest conservation in Canada. In the very earliest of his lumbering days he protested to the authorities against what he considered to be the ruthless destructiveness of lumbering methods in those days. He served as president of the Canadian Forestry Association and also as a delegate to the American Forestry Congress in Washington.

As a mason the late Mr. Aubrey White attained very high distinctions. He was made Deputy Grand Master of the Grand Lodge of Canada in 1909, and held that office until 1911 whe he became Grand Master. He was a member of King Solomon's Lodge, and in 1911 was the recipient of a fine cabinet of silver from his brother masons.

United Kingdom Requirements for Hazel Rods

A leaflet issued by the Board of Agriculture for Scotland on the utilization of hazel coppice has been forwarded to the Canadian department of Trade and Commerce by Mr. J. T. Lithgow, trade commissioner at Glasgow. The attention of landowners, factors, foresters, and timber merchants is called to the fact that large quantities



Hazel Rod Fender wanted by the Navy

of hazel rods are required for the manufacture of fenders for battleships of the Imperial navies, and the director of navy contracts is willing to receive tenders for the supply of these rods. It is possible that some of the smaller Canadian woods which grow in swamps might be suitable for this purpose. The following particulars may therefore be of interest:—

Hazel fenders are made in two sizes. The fender shown in the accompanying illustration is 4 ft. in length and 5 ft. in circumference and contains 600 rods. Another size of fender which is used is 6 ft. in length by 6 feet in circumference and contains 700 rods. In addition to the rods two wooden discs of elm, or some other hardwood, 6 inches in diameter and 2 inches thick, are required for each fender.

The class of rods required is similar to the wands utilized for crate-wood. The rods should be as straight as possible and from 8 feet to 16 feet in length, with a diameter at the "root-cut" not exceeding 1¼ inches. They are simply cut off root, snedded out in the wood, and for convenience in delivery are made up into bundles of 100 rods, which are fastened with four or five ties of bale wire.

In making up the fenders the rods are cut to the required lengths, and are built into an iron cradle, which allows of their being racked up by means of a heavy rope and winch. Through the centre runs a wire hawser, a little longer than the fender, with an eyelet at each end. Some distance from the ends of this wire hawser are fixed the hardwood discs or flanges. Small brush material and tops are tied over these flanges before the centre is built in. The outside rods are then strained over this central core, which prevents it from being pulled out. The fender is braced by three ties of strong wire rope, one at each end and one in the middle. After the wire ties are fixed on, they are usually tightened further by wedging in a few extra rods. The fender is completed by being dressed off on the ends with an adze.

Copies of the specification No. 669, for hazel rod fenders, giving full details, may be obtained on application to the Director of Navy Contracts, Admiralty, London, S.W.

The Board of Agriculture, 29 St. Andrew Square, Edinburgh, are prepared to give any advice as to the suitability of the material for the above purpose and every endeavour will be made to bring those who have suitable material to offer into touch with the manufacturers willing to contract with the Admiralty for the supply of the completed fenders.

An Important English Trade Enquiry

In the July 19th issue of the Weekly Bulletin of the Department of Trade and Commerce, attention is drawn to trade enquiry No. 859 from the Trade Commissioner at Glasgow. This enquiry refers to a large importing firm in Liverpool who wish to obtain quotations on the following:—

Staves.—Quotations c.i.f. Liverpool for the following dimensions: 42-inch by 5/8-inch by 2½-inch to 4½-inch wide, average 3-inch. Spruce, balsam fir, Douglas fir acceptable.

Spruce, unplaned.—Quotations c.i.f. London in parcels: 2 ends each 17 by 14 by 9/16, in one or two pieces; 2 sides each 20½ by 17 by 7/16, in one or two pieces; top and bottom, 20½ by 14⅞ by 7/16; 4 battens 13⅞ by 2 by 9/16.

Buyers can take about 500,000 boxes over a year.

Spruce butter boxes.—Quotations c.i.f. Liverpool for the following dimensions: sides, 13⅛-inch/12⅛-inch by 13-inch by 9/16-inch full thick; ends, 12-inch/11-inch by 13-inch by 9/16-inch full thick; bottom, 12⅛-inch by 12⅛-inch by 9/16-inch full thick; top, 13⅛-inch by 13⅛-inch by 9/16-inch full thick. 180,000 56-lb. department butter boxes.

All parts in two pieces each T. and G. Planed both sides to hold the thickness named after planing with a "breakjoint" between sides and ends of not less than 3¼-inch inclusive of T. and G. (That is to say that the distance between the joints of the sides and ends when the box is made up must not be less than 3¼-inch).

The name of the above firm may be obtained on application to the Department of Trade and Commerce, Ottawa.

Floods Break Many Eastern Booms

A heavy rain on the night of Saturday, July 10th, raised the water in the Southwest Miramichi to such an extent that the boom broke at 3 o'clock in the morning and about 6,000,000 feet of logs were swept down the river towards the sea. The logs belonged to the Miramichi Lumber Company, D. J. Buckley, Ritchie, Burchill, O'Brien, Dominion Pulp Company, Maloney and the J. B. Snowball Company. When the gap was finally closed there was still a large quanitiy of logs in the boom. The Northwest boom on the Miramichi River was also the scene of much trouble. A hastily constructed boom was stretched across the river at the northwest bridge and checked the downward sweep of the logs from the boom above which had broken.

Recent reports state that the water at the southwest boom rose from 9 to 15 feet and steamers and other boats pressed into service were helpless against the force of the swollen waters. The booms at Bartibogue, Churchpoint, Bay du Vin and Tabusintac held against the flood.

The lumbermen interested in the breaking of the southwest dam held a meeting the next day at Newcastle to arrange for joint action in saving the logs. James Robinson was given full charge of the work. Latest estimates state that not more than 6,000,000 feet of logs went adrift and that nearly all of them will be saved.

On the Black River the boom holding Mr. McNaughton's logs gave way and it is reported that a large quantity escaped.

At the mouth of the Nashwaak the flood became so great that the booms of the Partington Pulp and Paper Company are reported to have broken, releasing a large quantity of logs, which were carried into the St. John River.

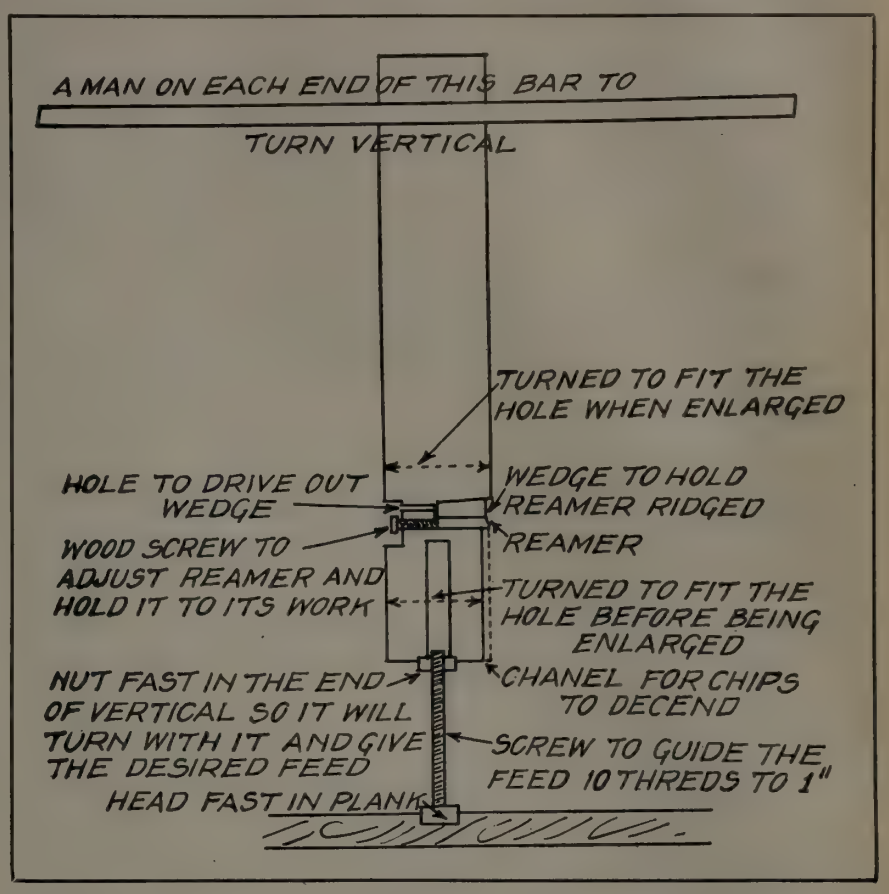
Death of Jonathan Brown of Montreal

Mr. Jonathan Brown, of Montreal, who was engaged for several years in the lumber business, died on July 16 at his residence, 1050 Dorchester Street West. Mr. Brown was a native of Windsor, P. Q., and in 1856 obtained a position with Mr. James Shearer, Montreal. Subsequently he became a partner in the firm of Shearer, Brown & Company, Limited, now known as the James Shearer Company, Limited, lumber merchants and sash and door manufacturers. Mr. Brown retired from business about twelve years ago, being then vice-president of the company. He was a member of the Montreal Board of Trade, a life governor of the Montreal General Hospital, a life governor and for many years honorary secretary of the Protestant Hospital for the Insane at Verdun, and a director of the Montreal Horticultural Society.

Enlarging Bore of a Fly Wheel

Editor Canada Lumberman:— Quebec, P. Q.

In a recent issue of the Canada Lumberman you published an enquiry in regard to the way in which to enlarge the bore of a fly wheel that is found to be 1/128 part of an inch too small. This work could be done with a dry hardwood vertical in which there is set a cast steel reamer, as shown in the accompanying sketch. I also think that such a small amount could be ground out with a dry hardwood plug and emery. This would take less time to prepare, but a much longer time to do the work than the vertical reamer.—R. Sissons.


A MAN ON EACH END OF THIS BAR TO TURN VERTICAL
TURNED TO FIT THE HOLE WHEN ENLARGED
HOLE TO DRIVE OUT WEDGE
WEDGE TO HOLD REAMER RIDGED
WOOD SCREW TO ADJUST REAMER AND HOLD IT TO ITS WORK
REAMER
TURNED TO FIT THE HOLE BEFORE BEING ENLARGED
NUT FAST IN THE END OF VERTICAL SO IT WILL TURN WITH IT AND GIVE THE DESIRED FEED
CHANEL FOR CHIPS TO DECEND
SCREW TO GUIDE THE FEED 10 THREDS TO 1"
HEAD FAST IN PLANK

Another Method for Enlarging Fly Wheel Bore

Editor Canada Lumberman:—

One of your readers recently asked how to enlarge a fly wheel which had been bored 1/128 part of an inch less than the diameter of the shaft on which it was to fit. By heating the hub of the wheel it will be possible to get it on the shaft nicely and make a sure job. I am pretty certain that such a wheel was bored smaller so as to be put on by heating it.—Millwright.

Parrsboro Shipments to United Kingdom

Our correspondent at Parrsboro, N.S., under date of July 7th, reports that deals and scantling cleared from Parrsboro this season for the United Kingdom amounted to 13,899,854 superficial feet. This was carried in twelve schooners, which took 4,797,056 feet, and the balance of 9,102,798 feet formed the cargoes of two Danish and one Norwegian steamers, and two Norwegian and one Russian barque. Several of the schooners are now on their second voyage, and, so far as is known, they have all escaped disaster, with the exception of the new four-masted schooner, L. C. Tower, which was built at Port Greville this season at a cost of $31,000, and was on her maiden voyage. This vessel of 518 tons net, and with a cargo of 641,000 feet of lumber was torpedoed off the coast of Ireland a few days ago. The vessel, freight and cargo were fully covered by insurance, so the owners will lose nothing but their summer's business from the vessel.

La Loutre Dam Contract Let

The contract for the construction of La Loutre Dam, on the St. Maurice River, P.Q., has been let to the St. Maurice Construction Company, Limited, at $1,425,000. It is claimed that the lumbermen in the district will benefit greatly by the construction of this dam, as it will give a regular flow of water, enabling the logs to be driven with certainty, and eliminating the risk of the logs being held up owing to low water. The lumber companies will have to pay annual amounts to the Quebec Government, based on the benefits derived. The dam will be provided with a log sluice opening which will be closed by a structural steel gate. The logs will be passed from the level of the water in the reservoir to the level in the lower pool, through a log slide which will be raised or lowered according to the water level.

British Shook Agents' Requirements

Continuation of Information Furnished by H. R. MacMillan Regarding Good Trade Openings

British shook agents handle the greater part of the shook business in certain other countries, notably South Africa, Australia, Java, Borneo, India, Ceylon, Straits Settlements. These countries are very largely supplied with shooks from Sweden. It is possible that Canadians might now increase their proportion of that business. The Swedish shippers have the advantage both in frequency of sailings, choice of ports at which Swedish shippers can quote c.i.f., and in freight rates. The Canadians have the advantage of a lower f.o.b. timber value and a higher grade timber. This advantage will each year become more evident. It is possible that now some Canadian manufacturer may be in a position to compete with the Swedish shippers.

Quotations are now desired for the following specifications, and contracts can be closed if the prices are favorable.

Reference Specification No. 1

Please quote lowest prices c.i.f. Fremantle for the goods as specified below:—

75,000 "G" Boxes.
4 Pieces 27⅝ in. x 5⅞ in. x 3/16 in.
2 Pieces 27⅝ in. x 5 in. x 3/16 in.
3 Pieces 13½ in. x 5½ in. x 9/16 in.
Shipment in 3 lots of 20/30,000 boxes each between June and November.
25,000 "X" Boxes.
4 Pieces 27⅝ in. x 5⅞ in. x ¼ in.
2 Pieces 27⅝ in. x 5 in. x ¼ in.
3 Pieces 13½ in. x 5½ in. x ⅝ in.
Shipment 10/15,000 boxes August and 10/15,000 November.
10,000 "H" Boxes.
6 Pieces 27¾ in. x 4 in. x 3/16 in.
2 Pieces 27¾ in. x 5¼ in. x 3/16 in.
3 Pieces 13½ in. x 5½ in. x 9/16 in.
Shipment in September.
10,000 "P" Boxes.
2 Pieces 19½ in. x 8 2/3 in. x ⅜ in.
4 Pieces 19½ in. x 7 in. x ⅜ in.
2 Pieces 14¼ in. x 8 2/3 in. x ¾ in.
Shipment, September.
30,000 "Q" Boxes.
4 Pieces 19½ in. x 6⅝ in. x 5/16 in.
2 Pieces 19½ in. x 8¾ in. x 5/16 in.
2 Pieces 14 in. x 8⅞ in. x 11/16 in.
Shipment, September.

Wood red and/or white, sawn only and wire bundled.

Reference Specification No. 2

Please quote lowest prices c.i.f. Durban for the goods as specified below:—
12,000 Soap Boxes No. 1.
Tops and bottoms 16¾ in. x 11¾ in. x 5/16 in. actual, in 2 pcs. t. g. and g.
Sides 16¾ in. x 7½ in. x 5/16 in. actual, in 1 piece.
Ends 11⅛ in. x 7½ in. x 11/16 in. actual, in 1 piece.
SHIPMENT:
6,000 to be shipped as soon as possible.
6,000 to be shipped three months later.
10,000 Soap Boxes, size 2.
Tops and bottoms 16¾ in. x 12⅜ in. x ¼ in. actual, in 2 pcs. t. g. and g.
Sides 16¾ in. x 8⅛ in. x ¼ in. actual, in 1 piece.
Ends 11 13/16 in. x 8⅛ in. x ¾ in. actual, 1 piece.
SHIPMENT:
5,000 to be shipped as soon as possible.
5,000 to be shipped three months later.
Red and/or whitewood, very finely sawn, all wood to be thoroughly dry to avoid any shrinkage in South Africa.
To be packed in shooks for shipment, bound with hoop iron or wire fastened both lengthways and crossways.

Reference Specification No. 3

Please quote lowest prices f.o.b. for the goods as specified below:—
40,000 Boxes No. 1. Inside 17¼ in. x 17¼ in. x 6⅞ in.
1 T 1 B 18½ in. x 17⅞ in. x 5/16 in. in 3 pieces.
2 Sides 18½ in. x 6⅞ in. x 5/16 in. in 1 piece.
2 Ends 17¼ in. x 6⅞ in. x 5/8 in. in 1 piece.
40,000 Boxes No. 2. Inside 21⅛ in. x 10½ in. x 9⅛ in.
1 T 1 B 22⅜ in. x 11⅛ in. x 5/16 in. in 2 pieces.
2 Sides 22⅜ in. x 9⅛ in. x 5/16 in. in 1 piece.
2 Ends 10½ in. x 9⅛ in. x 5/8 in. in 1 piece.
40,000 Boxes No. 3. Inside 21⅛ in. x 10½ in. x 9 in.
1 T 1 B 22⅜ in. x 11⅛ in. x 5/16 in. in 2 pieces.
2 Sides 22⅜ in. x 9 in. x 5/16 in. in 1 piece.
2 Ends 10½ in. x 9 in. x 5/8 in. in 1 piece.
Wood all white, smoothly sawn and bundled with wire.

Reference Specification No. 4

Please quote lowest prices c.i.f. Cape Town for the goods as specified below:—
140,000 Explosives Boxes No. 2A.
1 T 1 B 22 in. x 9¼ in. x ⅜ in. in 2 pieces t. g. and g.
2 Sides 22⅛ in. x 7⅜ in. x ½ in. in 1 piece.
2 Ends 9⅜ in. x 7⅜ in. x ½ in. in 1 piece.
Wood red and/or white. All boards to be planed one side. Wire bundled.

Reference Specification No. 5

Please quote lowest prices c.i.f. Delagoa Bay for the goods as specified below.
10,000 Orange Boxes. Outside 26 in. x 12 in. x 12 in.
1 T 1 B 26 in. x 11 in. x 1/4 in. in 2 equal pieces.
2 Sides 26 in. x 11 in. x 1/4 in. in 2 equal pieces.
2 Ends 12 in. x 12 in. x 11/16 in. in 2 pieces t. g. and g.
1 Centre 12 in. x 12 in. x 11/16 in. in 3 pieces t. g. and g.
Wood red and/or white, sawn only and wire bundled.

Reference Specification No. 6

Please quote lowest prices c.i.f. Brisbane for the goods as specified below:—
40,000 Boxes.
1 T 1 B 19⅛ in. x 13 in. x 7/16 in. in 3 pieces t. g. and g.
2 Sides 19⅛ in. x 6⅝ in. x 9/16 in. in 1 piece.
2 Ends 11⅞ in. x 6⅝ in. x 11/16 in. in 1 piece.

No piece in tops and bottoms to be less than 3 inches wide. All bundles for tops and bottoms must have one wire lengthways as well as two crossways, for the ends one lengthways as well as one crossways, and for the sides two crossways as usual.

Wood red and/or white, free from loose and/or large knots, blue wood and wane. Sawn only, and wire bundled.

Reference Specification No. 7

Please quote lowest prices c.i.f. Fremantle for the goods as specified below:—
Box No. 1. Inside measure 12⅝ in. x 10½ in. x 8½ in.
1 T 1 B 13¾ in. x 11 in. x 1/4 in. in 3 pieces.
2 Sides 13¾ in. x 8½ in. x 1/4 in. in 2 pieces.
2 Ends 10½ in. x 8½ in. x 9/16 in. in 1 piece.
Box No. 3. Inside measure 20½ in. x 15 in. x 11 in.
1 T 1 B 22 in. x 15⅝ in. x 5/16 in. in 3 pieces.
2 Sides 22 in. x 11 in. x 5/16 in. in 2 pieces.
2 Ends 15 in. x 11 in. x 3/4 in. in 1 piece.
Box No. 5. Inside measure 26½ in. x 16½ in. x 9¼ in.
1 T 1 B 28⅛ in. x 17¼ in. x 3/8 in. in 3 pieces.
2 Sides 28⅛ in. x 9¼ in. x 3/8 in. in 2 pieces.
2 Ends 16½ in. x 9¼ in. x 13/16 in. in 1 piece.
Box No. 10. Inside measure 15¼ in. x 10¾ in. x 8¼ in.
1 T 1 B 16½ in. x 11⅜ in. x 5/16 in. in 3 pieces.
2 Sides 16½ in. x 8¼ in. x 5/16 in. in 2 pieces.
2 Ends 10¾ in. x 8¼ in. x 5/8 in. in 1 piece.
Wood red and/or white, sawn only, and wire bundled.

Reference Specification No. 8

Please quote lowest prices as below for the goods as specified below:—
Apple Case—
4 pieces 24 in. x 5½ in. x ¼ in.
2 pieces 24 in. x 7 in. x ¼ in.
2 pieces 11½ in. x 7 in. x 11/16 in.
2 pieces 12 in. x 1 in. x ¼ in.
Pine Case—
8 pieces 27 in. x 4 in. x 5/16 in.
3 pieces 13½ in. x 4½ in. x 5/8 in.
Giant Pine Case—
8 pieces 27 in. x 5 in. x 5/16 in.
3 pieces 15½ in. x 6 in. x 5/8 in.
Please quote c.i.f. Algoa Bay for the above boxes.
Box No. 1—
4 pieces 18 in. x 5½ in. x 3/16 in.
2 pieces 18 in. x 1¾ in. x 3/16 in.
2 pieces 11½ in. x 2 in. x 1/2 in.
Box No. 2—
4 pieces 18 in. x 5½ in. x 3/16 in.
2 pieces 18 in. x 2 in. x 3/16 in.
2 pieces 11½ in. x 2¼ in. x 1/2 in.
Box No. 3—
4 pieces 18 in. x 5½ in. x 3/16 in.
2 pieces 18 in. x 2¼ in. x 3/16 in.
2 pieces 11½ in. x 2½ in. x 1/2 in.
Box No. 4—
4 pieces 18 in. x 5½ in. x 3/16 in.
2 pieces 18 in. x 2½ in. x 3/16 in.
2 pieces 11½ in. x 2¾ in. x 1/2 in.
Box No. 5—
4 pieces 18 in. x 5½ in. x 3/16 in.
2 pieces 18 in. x 2¾ in. x 3/16 in.
2 pieces 11½ in. x 3 in. x 1/2 in.
Box No. 6—
4 pieces 18 in. x 5½ in. x 3/16 in.
2 pieces 18 in. x 3¼ in. x 3/16 in.
2 pieces 11½ in. x 3½ in. x 1/2 in.
Box No. 7—
4 pieces 24 in. x 5½ in. x ¼ in.
2 pieces 24 in. x 8 in. x ¼ in.
2 pieces 11½ in. x 8 in. x ¾ in.
Cleats—
11¼ in. pieces x ⅝ in x ½ in.
Please quote c.i.f. Cape Town for these boxes.
Wood may be red and/or white for all boxes. Sawn only, and wire bundled.

Reference Specification No. 9

Please quote lowest prices cost and freight Balek Pappan for the goods as specified below:—

Caseboards for candle boxes.—The boards to be securely bundled and bound with strong steel wire in order to reduce any loss owing to transhipment and landing to a minimum.

The timber must be good, sound, well seasoned, free from loose knots, wane and blue wood and to have square edges.

We require alternative quotations:—
1. For the boards all planed on one side, and
2. For the boards all smooth sawn.

As the dimensions—16 m/m and 8 m/m are to be the thicknesses after

planing, the boards, if shipped smooth sawn, are to be of the necessary increased thickness, so as to provide for planing on one side at destination.

Specification of wood required for candle boxes:—

140,000 pieces 16 m/m thick—
- 14,000 pieces 16.3 x 15 c/m
- 12,000 pieces 21.6 x 14 c/m
- 24,000 pieces 21.4 x 18.5 /cm
- 66,000 pieces 22.2 x 21.1 c/m
- 18,000 pieces 30.5 x 12.8 c/m
- 6,000 pieces 25 x 22.4 c/m

280,000 pieces 8 m/m thick—
- 14,000 pieces 26 x 15 c/m
- 12,000 pieces 23.6 x 14 c/m
- 24,000 pieces 30.7 x 18.5 c/m
- 66,000 pieces 34.5 x 21.1 c/m
- 18,000 pieces 45 x 12.8 c/m
- 6,000 pieces 35.4 x 22.4 c/m
- 14,000 pieces 26 x 18 c/m
- 12,000 pieces 23.6 x 23.6 c/m
- 24,000 pieces 30.7 x 22.8 c/m
- 66,000 pieces 34.5 x 23.8 c/m
- 18,000 pieces 45 x 32 c/m
- 6,000 pieces 35.4 x 26.4 c/m

Reference Specification No. 10

Please quote lowest prices cost and freight Singapore for the goods as specified below.

Petroleum cases.—Inside measure 49.1 by 24.6 by 36 c/m. Tops in one piece 10 m/m thick after being dressed, to be smooth planed on one side and to be strongly bundled in 25 pieces per bundle. Tops to be 2 m/m shorter and 4 m/m narrower than the outside measurements of the box. Each bundle to be marked "T."

Bottoms, same particulars as for tops, but must be in two equal pieces, and each bundle to be marked "B."

Sides to be 10 m/m thick after being dressed, in one or two pieces. No piece less than 15 c/m wide, smooth planed on one side and to be strongly tied in bundles of 25 pieces each. If in two pieces to be bundled so that they make one complete side so as to save labor in sorting when the sides are put together. Each bundle to be marked "S." Ends in one piece 18 m/m thick after being dressed. To be smooth planed on one side, the grain of the wood to run up and down from top to bottom, and to be bundled 20 pieces per bundle. Each bundle to be marked "E."

All bundles to be double bound with wire, one strand each way. All bundles of one steamer lot to have a number in red in a diamond. The following shipment to have the next following number. Wood red and/or white.

Butter Boxes Required in Ireland

An important market for high grade boxes is offered in Ireland, where 2,000,000 butter boxes are used annually, the three important specifications are given below.

56 lbs.—
- 1 T—13½ x 13½ x ⅜ — 2 pieces, t.g.
- 1 B—12¼ x 12½ x ⅜ — 2 pieces, t.g.
- 2 S—13½—12¼ x 12½ x ⅜ — 2 pieces, t.g.
- 2 E—12¾—11¾ x 12½ x 9/16 — 2 pieces, t.g.
- 4 angles, 12¼ x ¼ section.

28 lbs.—
- 1 T—12⅛ x 11¾ x ⅜ in 2 pieces, t. and g.
- 1 B—11⅛ x 10¾ x ⅜ in 2 pieces, t. and g.
- 2 S—12⅛ — 11⅛ x 7⅞ x ⅜ 1 piece.
- 2 E—11 in. — 10 in. x 7⅞ x ½ 1 piece.

14 lbs.—
- 1 T—10¼ x 9½ x 5/16 — 2 pieces, t. and g.
- 1 B— 9½ x 8½ x 5/16 — 2 pieces, t. and g.
- 2 S—10¼ — 9½ x 6 in. x ⅜ 1 piece.
- 2 E— 8⅝ — 7⅝ x 6 in. x 7/16 1 piece.

The 56-pound box sells for 8.5 pence, the 28-pound for 4.75, the 14-pound for 2.9 pence c.i.f. Cork or Limerick. The prices may be slightly higher at the present time. The boards must all be white, tasteless, spruce, planed both sides, wire bundled. The importers usually buy in full cargoes, filling up if necessary with spruce deals and scantlings. Any one wishing to compete with the Scandinavian product at the above prices should send sample bundles of shooks to the address to be secured from the Department.

What to Expect of a Sander

Determining as it does, the finish of your product, sanding is one of the most important operations in manufacturing. It deserves constant watching.

I have taken for the subject of this article "What You Should Expect from a Sander," but before I go on to treat of the sander itself, I must first insist upon the importance of the operator in all sanding.

In emphasizing the operator's importance I do not mean to convey the idea that he should be a man of wide experience in operating sanders (although experience always helps) but he should be careful and painstaking. He should have pride in the work, and endeavor to secure the best results at all times. If your sanding is not of the high standard that you desire, consider first whether your operator has the above simple, yet necessary qualifications. It is true that the best sander in the hands of a careless operator will not turn out fine work. But, of course, it is equally true that even the best operator cannot secure a high quality finish on a worn out or out of date machine.

Assuming now that the operator is a careful and consciensious worker I will go on with my subject.

From long experience as a sander operator, and, later in supervising the work of others, I am convinced that one of the most important things to be considered in buying a sander is the ease with which it can be operated.

I would also consider the different devices of the machine that would help secure fine sanding in an economical way. Before buying two late type sanders recently I visited the plants of several sander makers, and I would urge everyone in the market for two or three new sanders to do the same if possible. Go and see the machine in course of construction—see what care is taken in constructing it; how the drums are made—how the felt is put on the drums, and finally, see the machine tested out. Study the advantages of the different devices, and watch the work of the sander on various kinds of stock. Then consider whether men in your factory—who may not have had much experience in sander operating—can easily get the same good results. I think too many buyers of sanders install machines on the strength of fine samples of work done on some certain machine. You should know how much labor is required to secure a fine finish before you buy.

Of the modern sander you have a right to expect that the machine will produce fine work in the hands of an ordinary mechanic, who is careful to make adjustments when necessary or desirable. You have a right to expect a standard of quality that will seldom require any retouching.

In an Eastern factory, where I once worked, it was the usual custom to run through the three drum sander, and afterwards finish it on the belt sander. Much of the stock run was veneered, and after going through the drum sander the work would often be so rough and uneven that in finishing the stock on the belt sander we would sometimes go through the first coat of veneer. This necessitated planing down, and applying another coat of veneer.

Only recently I visited the above factory but there were no belt sanders in evidence, two modern three drum sanders are finishing the stock in a manner that calls for no touching up.

They are doing their sanding at less than half the former expense of securing the same finish, and their product enjoys an enviable reputation. If you are sanding in the way that they formerly did it, you can expect the same decreased expense and fine finish that they have realized by installing the new modern drum sanders.

In conclusion, there is a form of expression used daily in courts of justice which I think we can adapt very well in a definition of what a sander should do. "A sander should do the sanding, the whole sanding, and nothing but the sanding." You should expect a modern drum sander to do 95 per cent. of your sanding in a way that does not require the use of a belt or touching up by hand. When I say that the sander should do "nothing but the sanding," I mean that you cannot expect the sander to do the work of a surfacer as well as a sander, and still produce a fine finish. This is unfair to the sander. Have your stock in good shape when it comes to the finishing stage.—H. D. H., in Berlin Quality.

Price Brothers & Company Hold Picnic

On Thursday, July 3rd, Messrs. Price Brothers and Company, Limited, closed their mills at Kenogami and Jonquiere, P. Q., and entertained their entire staffs and employees, together with their wives and families, at a picnic, to celebrate Dominion Day and July 4th, the chief idea being to cement the good feeling already existing between themselves and their numerous workers. There were 1,500 people present at the picnic which was conducted in a very successful manner. A programme of sports was carried out, commencing with a football match in which Sir Wm. Price took the place of one member of a team who was absent. Unfortunately his team lost. The match was followed by a programme of races and a tug-of-war. A baseball match was also played between the Kenogami and the Jonquiere employees, the Kenogami team winning in five innings by a score of 6 to 4.

British Opening for Saw Mill Machinery

Manufacturers of saw-mill and woodworking machinery may be interested in Trade Inquiry No. 831, which has been received from Mr. Harrison Watson, Trade Commissioner at London, notifying the Department of Trade and Commerce at Ottawa of the name of a firm who are large manufacturers of saw-mill and woodworking machinery. As their own plant is heavily engaged in Government work, and as they are receiving inquiries from all parts of the world, which they cannot deal with themselves, they are prepared to receive complete information from any Canadian manufacturers of saw-mill and woodworking machinery, enabling them to negotiate for orders without being obliged to refer any further to Canada. They wish to be placed in the same position as the manufacturer would put his traveller or agent. Canadian manufacturers wishing to avail themselves of such an opportunity may be supplied with the name of the firm by applying to the Department of Trade and Commerce, Ottawa. (Refer File No. 810).

B. C. Products to be on Exhibit at Toronto

An interesting exhibit of B. C. timbers and their manufactured products will probably be on view in the near future in the Board of Trade rooms, Toronto. The Forest Branch of the Department of Lands has requested the Canadian Manufacturers' Association to find space for an exhibit of this nature and the best available place is the Board of Trade quarters. The exhibit consists of four sections so designed as to occupy very little floor space and will include samples of B. C. finished, doors, mouldings, etc., together with an interesting series of logging, manufacturing and shipping scenes. Accompanying one of the panels of the exhibit is a set of four printed descriptions of the chief timbers of B. C., namely, Douglas fir, spruce, red cedar and hemlock, so arranged as to bring very clearly and forcibly to the attention of the observer the utility and value of these woods.

The descriptions of the four chief British Columbia timbers which are part of one of the panels forming the exhibit contain much information, part of which is as follows:—

British Columbia Douglas Fir

British Columbia Douglas fir (also known as Oregon pine, yellow fir and red fir) is Canada's timber giant. It grows up to 250 ft. high and 10 ft. in diameter. Many billion feet are now standing. It has great strength, as is shown by results of a large number of tests. The results of these tests are given, and they show Douglas fir to hold the premier place in competition with such timbers as long-leaf pine, short-leaf pine, western larch, loblolly pine, tamarac, western hemlock, redwood and Norway pine.

Douglas fir is used for structural timber, piling, railroad ties and cars, bridge and trestle timbers and general house-building.

"The fact that B. C. Douglas fir embodies (to a greater degree than any other structural wood now obtainable to commercial advantage) the requisites for all kinds of building, namely, strength, durability, beauty, light weight, and ease of handling or working, places it in the foremost position for construction and general building. Notwithstanding its great strength, fir is 22 per cent. lighter in weight than the next best soft wood structural timber. Its use for railway cars, packing houses, bridge and trestle work, for railways, ships, barges, scows, docks, wooden pipes and warehouses where it is subject to weather moisture, rapid changes in temperature and great stress and strain, proves B. C. Douglas fir's high resistance to decay.

"Paving Blocks:—The ease with which creosote penetrates Douglas fir along the grain; and its natural hardnsss, makes it an ideal paving-block material. Creosoted wood blocks are superior to other pavings, as they wear slowly, are nearly noiseless, afford a toe-hold for horses, are resilient, and practically impervious to water. British Columbia ships quantities of ties, paving blocks, and other creosoted material.

"Flooring:—Sawn edge-grain, B. C. Douglas fir makes a superlative floor, it takes a high polish, and will not splinter—wears long and evenly.

"Sash and Doors:—Many excellent qualities and especially strength, cheapness, and ease of working have made Douglas fir popular for this purpose.

"Inside Finish:—Beauty of grain, hard surface, ease of working, resistance to warping, shrinking, or swelling, and ability to take stains and paints, place Douglas fir among America's best-finish woods."

British Columbia Spruce

"British Columbia Spruce (Picea Sitchensis) is the largest of the spruces. It has an average height of 150 ft. x 4 to 5 ft. and a maximum of 200 ft. x 10 ft. in diameter. Its kiln dry weight is 26 lbs. per cubic foot. When manufactured into lumber it is white in color, odorless, and has no taste. It is of tough fibre and is free from resin or pitch; it does not easily split in nailing, even when worked to the thinnest possible thickness for the manufacture of boxes. Its light weight also gives it a low transportation cost.

"British Columbia Spruce is used for framing, sheathing, shelving and sub-flooring. While not sufficiently strong for heavy structural work it is well suited for many uses in general building. Its ease of working, light weight and ability to take and hold nails, particularly adapt it for framing, sheathing, shelving and sub-flooring. Being white, tasteless, free from resin or pitch, and of straight, even grain, it is suitable for many special purposes such as sink and laundry boards in houses and hotels.

"Boxes:—There is more spruce lumber used in the construction of containers for the marketing of food products, such as butter and cheese, lard, meats, fish, berries, dried and candied fruits and bakery products, than any other wood. British Columbia factories are equipped to do a large export business in all kinds of spruce boxes and shooks. British Columbia spruce is also of special value for the manufacture of refrigerators, and is used in large quantities for the lining of refrigerator cars.

"Finish:—B. C. spruce make a very desirable finish material; it is soft and easily worked, is of close straight grain, and being free from resin or pitch, takes and holds paints and stains well. A pleasant, cloudy appearance is distinctive of this wood when stained. It is obtainable in large, clear widths and lengths.

"Sash and Doors:—Being tough, of light weight, and sufficient strength, it is used for the manufacture of large doors for garages, freight warehouses and dock buildings. It is taking the place of poplar (the supply of which is becoming exhausted) in the manufacture of pumps and wind-mills.

"Cars and Paddles:—It is light, does not warp, is plentiful in clear lengths, and is without an equal for oar and paddle stock."

British Columbia Red Cedar

"British Columbia Red Cedar (Giant Arborvitea-Thuya Plicata) is 'the wood that weathers the centuries'. It is the largest of all cedars and averages 100 ft. to 150 ft. x 3 ft. Its maximum is 200 ft. x 15 ft.

Panel showing B C. Lumber Products

Samples of B. C. Finish

in diameter. This wood is exceptionally light (23 lbs. per cubic foot, kiln dried).

"B. C. Red Cedar is extremely durable and practically immune against the action of weather. Conditions of great moisture, heavy rains or snow, with alternating conditions of dry, hot weather, do not cause it to warp, twist or decay. B. C. Red Cedar is a soft wood of close, straight grain, and not only does it take stains and paints splendidly, but because it resists swelling and shrinking, it holds paint well.

"Exterior Finish:—Its qualities make it America's superlative exterior lumber, giving a dry, warm wall with extreme resistance to dampness. It is surpassed for outside walls, porch roofs, columns or posts, or for construction of lattices, trellises, pergolas, arbors, and summer houses. B. C. Red Cedar makes a peerless roof, which is cool in summer, warm in winter, will not sweat, leak, rust or crack, and requires only light supporting framing. Most beautiful effects on both roofs and sides of buildings can be obtained with fancy stained shingles. B. C. Red Cedar shingles are sawn edge-grain, and for this reason lie flat and will not warp or twist. By wetting shingles 24 hours before laying, using 3d. zinc, copper, or galvanized nails, the life of the roof will be doubled.

"Posts, Telephone Poles, Trolley Poles:—Durability, suitable taper and long lengths make B. C. Red Cedar the standard pole timber of Western America. It resists decay at the ground line.

"Rowboats, Canoes, Motor Boats:—High resistance to weather action and the long wide, clear lumber obtainable make it unequalled for this use.

Inside Finish:—Its beautiful, distinctive grain, and smooth, high finish, the fact that it takes and holds stains better than almost any other wood, never warps, splits or twists, hence can be used in wide panel, makes it a finish material second to none where it is not subjected to rough usage.

"Lining of Closets and Store-Rooms:—The pleasant odor of B. C. Red Cedar is obnoxious to moths and similar insects, hence B. C. cedar insures a moth-proof and clean closet. It will not soil and crack like plaster.

"The Fire Hazard—Its Real Explanation:—Fire records show that house fires mostly start inside and then the building is no safer because it has an incombustable exterior. Window openings are the danger in either case. Consider the disastrous fires in so-called absolutely fire-proof buildings, such as the Triangle Building in New York. Low fire insurance rates on residence in such cities as Vancouver, where houses are largely wood, demonstrate that such buildings are considered by insurance companies as excellent risks."

British Columbia Hemlock

"British Columbia Hemlock (Tsuga Heterophylla) has a fine grain, is soft, light and strong. Its average size is 130 ft. to 160 ft. x 2 ft. to 3 ft. Its maximum is 200 ft. x 5 ft. in diameter. It is most abundant and reaches its best development along the Pacific Coast. Its weight is 32 lbs. per cubic foot kiln dried. Tests show that B. C. hemlock is only 12 per cent. less in strength than Douglas fir. It is especially suitable where ease of working, handsome finish, strength, lightness and tastelessness are desired. It needs paint or preservative when exposed to the weather.

"Framing and Shelving:—For this purpose B. C. hemlock serves as well as Douglas fir. It is easily worked, light and strong. Locally it commands the same price.

"Flooring:—Excellent when cut edge-grain and used in dry places. It finishes smoothly on account of uniform texture of wood, and wears evenly."

Trade Opportunities for Canadian Wood in China

Mr. J. W. Ross, Canadian Trade Commissioner at Shanghai, China, under date of June 7th, reports as follows:—The growing importance of the timber trade of China is a matter of much significance to Canada, for considerable as the trade already is, the volume should materially increase in the future.

The quality of timber sent to this market is known as China grade, which is not the first quality, but contains a certain percentage of marketable timber and the balance of No. 2. Formerly a large proportion of the demand was made up of large squared logs, 18 to 24 inches square, which were eventually sawn or worked up by hand by native workmen. Less of this class of lumber has been coming in of late than was formerly the case. The greater portion now usually comes already sawn in the form of large planks and long pieces of square timber, flooring and joists and other sawn lumber. Dressed lumber and tongued and grooved is not imported in any great quantity.

There is a present demand for lumber in China, providing prices are right and shipments can be guaranteed.

Railway Sleepers

Railway sleepers have represented in some years a large proportion of the importation of softwood timber into China, and up to the present time, Japan has supplied by far the greater quantity of this class of wood.

Jarrah wood from Australia has been used to some extent in railway construction on certain lines in South China, but on central and northern roads, such expensive wood has not yet been found to be necessary. Creosoted Oregon pine, white oak and tamo (the latter from Japan) are both cheaper and work out at a less annual cost, comparing the life of both kinds of wood, than that of Jarrah.

Nevertheless, Jarrah is a very popular wood among all the British engineers engaged in railway management and construction in China. They are not as yet sufficiently familiar with creosoted pine or fir, and have no data as to the life of the latter in this country to go upon, and whether it is prejudice or not, are all very much disposed to employ Jarrah wood whenever possible. It would therefore seem from present indications and from conversations with different railway and timber people that Jarrah wood will continue to be employed, perhaps more extensively than was formerly the case for railway sleepers on China railways, notwithstanding its high initial cost.

The importance of the wooden box trade with China is a subject which warrants the closest attention. One has but to consider the vast number of tea boxes which have been leaving China during the years of the existence of this trade. At the present rate of consumption of native wood, the cost of the boxes will annually increase, and a difficulty in supplying the demand must eventually arise. Advices from Hankow call attention to the fact that a certain firm of tea exporters in that port are getting their boxes from England, made from wood supplied by Norway.

The matter of tea boxes is a subject which requires study, for not all kinds of wood are suitable for this purpose. The latter must be distinctly free from odor of any kind, which might be deleterious to the sensitive flavor of the tea. In all other respects it need not be of any very highy quality, so long as it is strong enough in fibre to hold the nails securely without splitting.

In addition to the China market for tea boxes, there is also a similar market in Ceylon for the same article.

Taking Their Share of the Burden

The accompanying illustration will be interesting to many readers of the Canada Lumberman. It affords an example of the fact that Canadian lumbermen are taking their share of the burden in connection with the war in Europe. The portraits in the illustration are those of W. J. Smith, Marksville, Ont., manager of the Stone Lumber Company's mills at that point. The younger man is Wm. Glyn Smith, his only son, 19 years of age, who enlisted with the 26th Battery, Canadian Field Artillery.

Mr. W. J. Smith was born in England and educated at Dr. Reddick's Grammar School near Chester. He came to Canada with his parents and settled in Algoma in 1881. Subsequently he became an apprentice in the Michigan lumber woods, in 1883. With the exception of eight seasons spent upon the lakes, he has followed the lumber trade ever since. In 1910 he left the Seaman Kent Company, Meaford, Ont., to take charge of the Stone Lumber Company's mills and is still in that position.

Wm. Glyn Smith, son of Mr. W. J. Smith, was born on St. Joseph's Island, Algoma, Ont. He has always spent his holidays at the mills, sometimes in the Michigan woods, acquiring practical lumbering knowledge. Recently he was a student at the University of Toronto, in the Forestry class. He joined the 26th Battery at Barrifield, as a gunner. He is an excellent example of the class of men produced in the Canadian woods, tall (6 ft. 3 in.) 190 pounds in weight, hardy and alert. He was educated at Sault Ste. Marie, the high school at Meaford and the University of Toronto.

Gunner Wm. Glyn Smith, C.F.A. W J. Smith, Marksville, Ont.

Commercial Importance of Tamarack

Technical Properties and Practical Uses of the Different Varieties of Canadian Larches

By A. H. D. Ross

1. 2. 3. 4.
1.—Western Tamarack, Slash Grain. 3.—Eastern Tamarack, Slash Grain.
2.—Western Tamarack, Edge Grain. 4.—Eastern Tamarack, Edge Grain.

The larches, or "tamaracks" are confined to the cooler portions of the northern hemisphere, and are easily distinguished from other cone-bearing trees (1) by having their needle-like leaves arranged in clusters on the sides of short lateral branchlets, (2) by the falling of the leaves in autumn. Altogether, there are eight species of larch, three of which occur in North America, two in Europe and four in Asia. All have very straight and rather slender stems and slender branches and their wood is characterized by great strength, stiffness, hardness and durability.

American Larch (Larix americana, Michaux; Larix laricina, Du Roi Koch) is also known as Eastern Larch, Black Larch, Red Larch, Tamarack, Hacmatac and "Juniper." This tree has a wide range of growth and adapts itself to a great variety of soil conditions. From Newfoundland its northern line of growth extends to Ungava Bay and Hudson Bay, westward to Coronation Gulf and Mackenzie Bay and along the eastern foothills of the Rockies to about latitude 53. Southward it extends to Pennsylvania, West Virginia, Wisconsin, Minnesota, Manitoba, Saskatchewan and northern Alberta. In moist, well-drained soils it is a rapid grower, but in muskegs and on the borders of swamps the growth is exceedingly slow. In northern Quebec muskeg-grown trees measuring only two inches in diameter were frequently found to be 57 to 73 years old. This exceedingly slow growth produced a very hard and fine-textured wood which might possibly do for tool handles. On a measured area the number of these tiny trees averaged 12,600 per acre; which, to the Liliputians described in Gulliver's Travels would appear as a dense forest of fair-sized saw-log timber, but to us would do for tent pegs, and to the giant Brobdignagians described by Gulliver might possibly do for tooth picks. In the Lac des Milles Lacs region, Ontario, a study of 130 upland and muskeg trees showed that the average age of 8-inch trees (measured 4½ feet from the ground) was 68 years, and of 12-inch trees 97 years. In the Riding Mountain Forest Reserve, Manitoba, the average age of 5-inch trees grown in upland soils was 35 years, and in muskeg soils 65 years. When full grown, the trees reach a height of 50 or 60 feet (occasionally 90) and a diameter of 18 to 20 inches (occasionally 30 inches).

All the larches are very intolerant of shade, and, as a result of this have to make a rapid height growth to keep ahead of their competitors for sunlight. The mutual crowding and shading of the lower branches soon results in their death and dropping to the ground; thus producing tall, slender trunks with very little taper. It is quite a common error to suppose that tamarack prefers muskeg to other soils. Its presence in these open spots is partly due to its intolerance of shade and partly to the ability of its seeds to germinate and grow in very wet places. The writer has a vivid recollection of wading around in the Sewall Swamp, Manitoba, in May, 1907, pulling tamarack seedlings which were shipped to the Dominion Forest Nursery Station at Indian Head, Sask., to be set out in "Nursery Rows" so as to give them a chance to develop a good root system before being planted where they are to attain their full growth. The average age of these seedlings was six years and their height only two feet; thus showing how slow the growth is at first in swampy water more or less saturated by tannin compounds. In from one to two years in the nursery rows a good root system was developed and the trees were set out in prairie soil which had been summer fallowed, and the growth since has been a most surprising one—some of them being now 20 feet high instead of 7 or 8 had they remained in the swamp. From this it will be seen that when we speak of the rate of growth of trees it is quite as important to know the soil conditions and closeness of the stand as it is to know how carefullly rings were counted and measurements were made.

The sapwood of eastern tamarack is rather thin and whitish but the heartwood is of a pale yellowish-brown color, straight-grained, moderately fine-to coarse-textured, weighs 39 pounds per cubic foot in the kiln-dry condition, is hard and strong and moderately durable in contact with the soil. Tests of wood grown in Marathon County, Wisconsin, with 19.9 rings to the inch and containing 52 per cent. moisture showed a fibre stress of 4,200, a modulus of elasticity of 1,236,000 and a cross-breaking strength of 7,170; whilst the endwise crushing strength was 3,480 pounds per square inch. The hardness was tested by observing the number of pounds pressure required to force a steel ball 0.444 inches in diameter into the wood half its own depth and gave 370 for slash grain specimens, 380 for edge grain and 401 for endwise resistance. The average shearing strength was 848 pounds per square inch and the average cleavage strength 161 pounds per inch. With a reduction of the moisture content to 11 per cent. the same wood had its endwise crushing strength increased to 7,590 pounds per square inch, its modulus of elasticity in cross-bending raised to 1,680,000 and its cross-breaking strength raised to 12,050. The wood checks and warps very little in the process of seasoning, but there is only a comparatively small amount of it sawn into lumber. During 1913 the cut reported from 238 mills amounted to only 10,263,000 board feet. Many lumbermen distinguish between "red" and "white" tamarack—the red-hearted trees being produced on colder, less favorable soils than the white tamarack. Most of the sawn stuff is used for house framing and flooring, for ship planking and for tank construction. By far the greater quantity, though, is used for railway ties, scaffold poles, pump logs, fuel, etc. In the days of wooden ships considerable quantities of "tamarack knees" were used.

Tamarack Ties

During 1914 the 47 steam railways and 31 electric railways operating in Canada purchased 1,507,902 tamarack ties at an average cost of 44 cents—which was an increase of 1 cent over the average price in 1913. Approximately one-half the eastern tamarack ties are imported from the United States but more of them appear to be treated with preservatives. Its spike-holding properties and good wearing qualities under the rail make tamarack a favorite tie material. Its splendid wearing qualities are due to the fact that the cell walls are much thicker than in many other woods. The pith rays are quite numerous and of considerable size—their walls being very thick and strong. Each annual ring has a zone of hard, dense tracheids which render it capable of sustaining the heaviest freight traffic and also make the wood very durable in the soil. Tamarack ties may be treated with solutions of ferrous sulphate ("copperas") or ferrous acetate, and ties so treated have lasted more than thirty years under heavy traffic. These ties were originally 9 feet long and were moved three times under the rail—being finally unfit for use because of the continual spiking. The decay of the sapwood averaged about one-eighth of an inch in depth, whilst the wood within was sound and bright. As untreated tamarack ties last from five to eight years, this is pretty good testimony regarding the efficiency of preservative treatment—when properly done. If proper penetration is not secured the annual cost of maintenance may be reduced very little. With creosote oil practically no penetration of eastern tamarack is secured, whereas with its western relative (Western Larch) a good penetration is secured with a moderate pressure. Both the eastern and the western tamaracks make excellent paving material, but are not used to any extent yet for this purpose.

The Larch Saw-Fly

About thirty years ago an insect known as the "Larch saw-fly" made its appearance in the New England States and spread rapidly to the north and west—destroying the tamarack as it went, until now it is almost impossible to find an area which has not been affected by the saw-fly. These flies multiplied with incredible rapidity and the eating of the leaves by their larvae or grubs caused the trees to die. In 1892 I observed dead tamarack as far north as Lake Mistassini, in the interior of the Labrador Peninsula, and since then have noticed the ravages of this imported European insect as far west as Edmonton.

So far as I know, it has not yet attacked the western larch of British Columbia and the states to the south of it.

Western Larch (Larix occidentalis) is also known as Western Tamarack, Red American Larch and Hackmatack. Its range extends from the western slopes of the continental divide eastward to southeastern British Columbia and the eastern slopes of the Cascade Mountains in Oregon and Northern Montana. It prefers moist bottomlands or high benches, but is found occasionally on dry mountain sides. Usually it is associated with Douglas fir, western hemlock, western white pine, western red cedar, etc., but occasionally forms pure stands. A study of 43 trees near Lake Summit, British Columbia, showed that 5-inch trees were grown in 29 years, 8-inch trees in 52 years, and 10-inch trees in 82 years. When full grown the trees are 100 to 180 feet in height and 2 or 3 feet in diameter; occasionally 250 feet and 5 feet—the ridges of the bark of old trees being strikingly massive. It is the largest and most massive of all the larches and the strongest and hardest of American conifers.

The wood is red to reddish-brown in color, with a thin and nearly white sapwood, straight-grained, coarse textured, weighs about 41 pounds per cubic foot, and is both strong and stiff. Specimens containing 46 per cent. moisture showed an endwise crushing strength of 3,700 pounds per square inch, a modulus of elasticity of 1,310,000 and a cross-breaking strength of 7,250; whilst a reduction of the moisture content increased these strength values to 5,490, 1,565,000 and 10,230 respectively. The pith rays form broad bands and have a structure almost identical with that of eastern larch. The tracheids are very thick-walled and decidedly tubular in outline, the lumen (interior space) being very small and in many cases almost invisible—a feature which gives the western larch a much greater hardness, strength and elasticity than eastern larch, or tamarack. In western larch the resin passages are not very numerous but are comparatively large and without tyloses (cement-like plugs)—which accounts for the greater ease of securing penetration with creosote than in the case of eastern larch.

The wood is used for lumber, ties, posts and fuel. For the year 1913 some 34 mills in British Columbia report a cut of 86,062,000 board feet, which sold at an average price of $13.73 per thousand. For the same year the number of ties cut was 1,225,956 at an average price of 52 cents, and for 1914 the figures were 1,121,347 at an average price of 41 cents. For 1914 some 381 firms report the purchase of 283,184 western larch poles at an average price of $2.33.

Mountain Larch (Larix Lyallii) is also known as Alpine Larch, Wooly Larch, Lyall's Larch and "Tamarack." This is a timber-line tree, usually between 4,000 and 7,000 feet, on both the eastern and western slopes of the continental divide in Alberta and British Columbia and ranges southwards along the Cascades of northern Washington and eastward to western Montana. The branches are much tougher and more flexible than those of western larch and usually turn upwards, but are occasionally drooping. The name "wooly larch" is due to the thick coating of brown-green hairs on the young twigs, which after several years become smooth and nearly black.

The heartwood is of a clear red-brown to deep orange-brown color, weighs about 44 pounds per cubic foot, is rather coarse-textured, hard and tough, but is too high up to be used commercially.

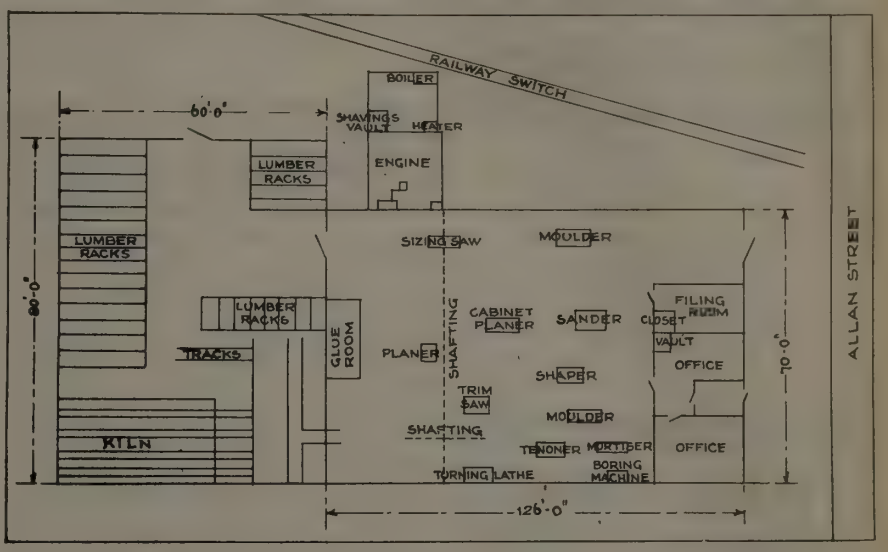
European Larch (Larix Europea) is closely related to our western larch and is occasionally found planted in parks and on lawns in Eastern Canada. The heartwood varies in color from deep reddich to brownish-yellow, but is apt to be lighter in color and not so firm in texture when grown in rich soils or in low sheltered situations. If carefully seasoned it warps and twists very little and is quite durable. It is not as heavy a wood as eastern tamarack and grows more rapidly. In Russia this tree often forms extensive forests, but in most of the hill regions of central Europe it is generally found mixed with other trees. In the warmer climates it yields a superior grade of turpentine known to the trade as "Venetian turpentine."

A great deal of the piling upon which the city of Venice rests consists of European larch—the lasting qualities of which were well known, not only in medieval times, but as far back as the days of Vitruvius and Pliny.

A peculiarity of all the larches is the difficulty with which the wood is ignited. If coated with plaster, beams and pillars of this wood would probably be found to justify Caesar's epithet "igni impenetrabile lignum." In closed stoves the wood burns fairly well and has a fuel value equivalent to eighty per cent. that of beech (Fagus sylvatica). The charcoal manufactured from European larch is very compact and is in great demand in some parts of Europe for iron smelting and other metallurgical purposes.

Reitzel Brothers New Plant

The planing mill operated by Reitzel Bros., at Waterloo, Ont., which commenced operations about a year ago is an interesting example of up-to-date methods in the layout and equipment of this class of plant. The building is constructed of reinforced concrete with mill construction roof. The equipment was mostly furnished by Jackson and Cochrane, of Berlin, Ont., and also includes a few machines furnished by the Canada Machinery Corporation, Galt, Ont. The power



is furnished by a Goldie & McCulloch 85 h.p. engine and boiler. The plant has a capacity for handling about $40,000 worth of business annually. The cost of the building was $34,000. Last year the business handled by the company amounted in value to $36,960.

The firm of Reitzel Bros., was formed on March 31st, 1907, to carry on business as architects and contractors in the town of Waterloo. In 1912 they added to the contracting business by starting a planing mill, with the idea of turning out materials for house building to be used in connection with their contracting. This class of material still forms the chief output of the plant, as the firm continues to specialize upon the designing and constructing of special houses.

The accompanying illustration shows the layout of the company's plant and office.

PLANT OF
GEORGE GORDON AND COMPANY, LIMITED
CACHE BAY, ONT.

Plant of Geo. Gordon and Company, Limited, Cache Bay, Ont., destroyed by fire on July 19th. The stock was saved and the company is running its other mill day and night so as to supply its large trade.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted-Lumber

Basswood Wanted

No. 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Lumber Wanted

Manufacturer wants a few cars of 4/4 No. 1 Common and Better Basswood 10 ft. and 12 ft. long. Also a few cars of 4/4 No. 2 and No. 3 Common Basswood 6 ft. to 16 ft. State quantities, when sawn, shipping point and lowest prices. Box No. 228, Canada Lumberman, Toronto. 15

For Sale-Lumber

For Sale

Cheese box Veneer in car lots.
G. R. JONES,
15-16 Eldorado, Ont.

For Sale

Ontario White Cedar Shingles for sale. Address Seymour Hawke, Millar Lake P. O., Ont. 14-17

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.
GEO. C. GOODFELLOW,
c Montreal, Que.

For Sale

A few cars strictly 4 x 16 in. White Cedar Shingles.
J. AUSTIN & SONS,
14-17 Kinmount, Ont.

For Sale

Valuable bush, Hardwood; 16 miles from Toronto. Box 222, Canada Lumberman, Toronto. 14-17

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

Ontario White Cedar Shingles 18 in.

2 cars XXXX.
4 cars Clear Butts.
4 cars XX or Sound Butts.
Full count, well manufactured, carefully graded. Prompt shipment.
C. M. WILLCOX,
14-15 Whitby, Ont.

For Sale

60,000 ft. 1 x 4/5 in. M. R. Spruce.
30,000 ft. 1 x 4 and up, M. R. Spruce.
30,000 ft. 2 x 4 and up, M. R. Spruce.
Lengths and widths separated.
60,000 ft. 1 x 10/12 in. White Pine Mill Cull.
30,000 ft. 1 x 4/5 in. M. R. White Pine Strips.
40,000 ft. 1 x 4 in. Box and Com. White Pine Strips.
Write for prices as stock must be moved.
The Elgie & Jarvis Lumber Company, Ltd.,
15 18 Toronto Street, Toronto, Ont.

FOR SALE
Norway and Jack Pine—Mill Run

1 x 4/5 x 10/16 ft.	850,000 ft.
1 x 6	410,000 ft.
1 x 8	67,000 ft.
1 x 10	14,000 ft.
2 x 4	158,000 ft.
2 x 6	161,480 ft.
2 x 8	306,222 ft.
2 x 10	144,537 ft.
2 x 12	26,849 ft.
Norway Pine Culls	
1 x 4 and up x 10/16 ft.	1,200,000 ft.

DEVON LUMBER CO.,
5t.f. Ottawa, Ont.

Wanted-Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

POSITION WANTED as Manager of lumber and woodworking business. Thoroughly experienced in Lumber, Factory and Office routine. Expert organizer and capable of producing maximum results. 15 years with one large Ontario Company; best credentials. At present engaged. Box 226, Canada Lumberman, Toronto, Ont. 15-16

Situation as stationary engineer by steady man with 1915 certificate, reference and tools. Have planing and sawmill experience, also with log deck, electric machinery, Corliss and high speed engines. John Bain, 180 Ontario Street, St. Catharines, Ont. Tel. "980 K." 15-16

Young man, 27, wants position as shipper or Estimator, at mill or in a retail yard. Eight years' experience in shipping Pine and Hemlock. One winter as assistant log scaler. Can come at once. Box 227, Canada Lumberman, Toronto, Ont. 15

Highest grade accountant, 20 years' experience in public works and lumber, now chief accountant in Ontario, wants change, Ontario or elsewhere. 40 years old, married. Highest references and securities. Box 210, Canada Lumberman, Toronto. 12-17

For Sale-Machinery

Generator For Sale

C. G. E. make—203-35 K.W. With Base. Pulley and Rheostat. Never been used. Is absolutely new.
VICTORIA WHEEL WORKS,
13-16 Galt, Ont.

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.
1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3½-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.
These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.
THE COE MFG. COMPANY,
Painesville, Ohio.

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. 15

Miscellaneous

Wanted

A second-hand Alligator, propeller driven, must be in good condition. Give full description with price and state where same could be delivered in case of purchase. Box 225, Canada Lumberman, Toronto. 15-18

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

For Rent

American Log Loader and operator for balance of the season. Very economical machine for loading or handling logs or timber. Trenton Cooperage Mills, Limited, Trenton, Ont. 14-15

To Whom It May Concern

The undersigned has been duly authorized as agent under Canadian Patent No. 149169 on Automatic Feeding Table for Planing Machines, to manufacture, issue licenses to others to manufacture, and transact any business in connection with said patented invention.
MONTREAL, July 6th, 1915.
JAMES R. LAW,
c/o Barnard, McKeown & Choquette,
15 145 St. James Street, Montreal.

Tenders for Pulpwood Limit

Tenders will be received by the undersigned up to and including Wednesday, the fifteenth day of September, 1915, for the right to cut pulpwood on a certain area situated north of the Transcontinental Railway, west of Lac Seul and south of English River in the District of Kenora.

Tenderers shall state the amount they are prepared to pay as bonus in addition to the Crown dues of 40c. per cord for spruce, and 20c. per cord for other pulpwoods, or such other rates as may from time to time be fixed by the Lieutenant-Governor in Council, for the right to operate a pulp mill and a paper mill on or near the area referred to.

Such tenderers shall be required to erect a mill or mills on or near the territory, and to manufacture the wood into paper in the Province of Ontario—the paper mill to be erected within such time and in such place as the Lieutenant-Governor in Council shall direct.

Parties making tender will be required to deposit with their tender a marked cheque payable to the Honourable the Treasurer of the Province of Ontario, for ten per cent. of the amount of their tender, to be forfeited in the event of their not entering into an agreement to carry out the conditions, etc.

The highest or any tender not necessarily accepted.

For particulars as to description of territory, capital to be invested, etc., apply to the undersigned.

N.B.—No unauthorized publication of this notice will be paid for.

G. H. FERGUSON,
Minister of Lands, Forests and Mines.
Toronto, June 5th, 1915. 12-17

For Sale

800 Gross Tons 56-lb. Rail.
1 40-ton Standard Gauge Locomotive.
1 15-ton Locomotive Crane.
W. FRASER,
14-15 83 Craig Street West, Montreal.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including:—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Matches for England

Matches of all kinds are made extensively in England by firms of well-known repute, but notwithstanding this, there are large imports from abroad. Last year, Sweden shipped 5,267,678 gross boxes of "safety" and 1,268,735 gross boxes of "other sorts" of matches to this country. From other countries there were also imported nearly 3,000,000 gross boxes of "safety" and 643,086 gross boxes of "other sorts."

Since the beginning of this year, Sweden has largely increased her shipments to this market. The imports from that country during January were 522,975 gross boxes of "safeties," the declared value being £31,689 and 103,975 gross boxes of "other sorts," valued at £7,550.

If, after consideration of the above particulars, any Canadian firm should desire to go further into the matter, they are invited to send samples to the Canadian Commissioner of Commerce, Ottawa, together with prices c.i.f. English port.

TIMBER CRUISES
Timber Estimates, Forest Surveys and Maps.
D. E. LAUDERBURN
1 Madison Ave., NEW YORK, N.Y.

J.M. & D.M. Croteau
Civil Engineers, Quebec Land Surveyors and Draughtsmen
81 St. Peter St., Quebec, Que.
Phone 2718
are prepared to examine and report on forest properties anywhere. Forest surveys, Logging maps, Timber estimates, Water Power, Water Storage, Topographical plans, Water supplies, Park Works, General plans for village sites and Private Estates. Railroad location and construction. Roads and Rivers improvements. Good information concerning Quebec Timber and Mining lands, cheerfully given.

Progress in Fireproofing Wood

Persistent agitation throughout the country to reduce the fire hazard has, in many instances, led to the replacing of wood work in buildings and other places with metal, brick and other material. Incidentally, too, it has led to many efforts to render wood fireproof, or practically so, that it may continue to be used for many of the purposes where it has been replaced by metal. Some of these efforts have proven too expensive to be practical and some have developed farcial characteristics, and jokes have been made about the burning of the scrap and shavings of the fireproof wood in the boiler furnace to make steam.

One of the most practical methods that has been adopted in this country is the idea of fireproofing doors and interior trim, by facing them with veneer and putting a cross-banding of asbestos between the veneer and the main core body. This serves the purpose of checking a fire, which may destroy the outer veneer face and ruin the woodwork generally, but it would not gain much headway, because the asbestos will check it pretty much as a tin covering on a wood door will prevent it burning through. A process for applying veneer in this way has been patented in this country, and the idea is making considerable headway, especially for door work for large office and public buildings.

There is a new idea, lately reported from England, in which wood is treated with a solution consisting mainly of phosphate of ammonia, which, it is said, serves to fireproof it, and at the same time make it more durable. The process of treatment is similar to the familiar process of creosoting wood to preserve it, as the treatment is given by the use of iron cylinders under vacuum to exhaust the sap, then under pressure to inject the solution. The sap is started by steaming, then the steam and sap are exhausted by vacuum, after which the chemical is turned in and pressure added.

The claims made for this process are that it fireproofs and preserves the wood, yet does not discolor it in any way or interfere with its use in cabinet and mill work. It is claimed that it can be worked, glued, painted, polished and handled just the same as any other wood, and that practically any wood may be treated. In support of the claims made for it is the fact that several railway companies in England are now using it, and that the British Admiralty has adopted this process for treating ship timber and lumber for boats and ships.

The cost of the process is given as ranging from 73 to 85 cents per cubic foot. As that would be equivalent to practically 7c per square foot, it is easy to see how the cost would interfere with its use generally for mill and cabinet work, as this cost itself is more than the average cost of lumber used. It would therefore only justify itself for very expensive work, and this will probably prevent it coming into general use, unless some way is discovered of materially reducing the cost of its application.

There is another process reported from England which consists in using a chemical mixture and dipping or soaking the wood in it before using, or if it is only desired to fireproof the outer surface it may be applied pretty much the same as paint and varnish. There have been filed with the Bureau of Foreign and Domestic Commerce, at Washington, samples of treated wood and information about the system. These will be loaned to any one interested on application.—The Wood-Worker.

A New Impregnation Method

Mr. Judson A. De Cew, of Montreal, has patented a new process of wood preservative, having for one of its objects to provide a material for the treatment of wood which will render it resistant to the attack of ferments, fungi and insects, and at the same time harden the wood treated. In the treatment of wood by impregnation with oil, it is necessary to use comparatively large quantities of oil and to impregnate the fibro-cellular bodies thoroughly. It is claimed that a large excess of oil must remain in the wood without resultant benefits. By the use of Mr. De Cew's material, the exact amount of oil necessary for preservation is introduced, and this is carried into the wood in the form of an emulsion until the desired depth of penetration is obtained. The invention consists essentially in a mixture or emulsion of suitable quantities of waste sulphite liquor, oil, and a soluble salt such as chloride of zinc, and this material is introduced into a suitable treating tank containing the wood to be treated by a suitable injector apparatus.

Wilson Lumber Company's Fine New Kilns

The Wilson Lumber Company, Limited, 1 Spadina Avenue, Toronto, who recently lost their dry kilns by fire, report that they have now been rebuilt and were to be in operation by August 1st. In rebuilding the kilns the company have taken care to install one of the best kilns in the country, having tile walls 13 inches thick, and a concrete foundation. Both ends of the kilns are to be all doors, so that there will be no waiting nor delay in either loading or unloading the trucks. The Wilson Lumber Company will thus be in a position to produce kiln dried stock as rapidly and satisfactorily as any other firm in Canada, and will thus maintain the excellent reputation which they had always enjoyed in the past for furnishing excellent goods.

Barbados Market Report

S. P. Musson, Son & Company, report under date of Barbados, May 14th, as follows:—Lumberstuffs.—White pine—There is no enquiry for merchantable, but a cargo of second quality would sell to advantage. Spruce—There have been no arrivals, but there is no enquiry and the market is fully supplied for present requirements. Pitch pine—No receipts. Shingles—Dealers carry full stocks, and there is but a limited demand at present. Shooks and wood hoops—No receipts.

St. John "No Mark" Log Sale

The "no mark" log sale was held in the Board of Trade room at St. John, N. B., recently. The spruce merchantable logs were sold to Mr. U. Miller at $13.50 per thousand feet with batts. at two-thirds. The pine logs were bought by Stetson, Cutler & Company at $6.75 per thousand feet. The cedar and hackmatack brought $8.75 and the hemlock $5.75 per thousand feet, full size, the purchasers being Fraser Limited, Fredericton. These prices are for logs at Fredericton.

Miscellaneous News of Interest to Lumbermen

Miss Geraldine FitzGerald Follis, niece of Mr. and Mrs. E. B. Foss, Bay City, Mich., was married on June 28th to Dr. James Marsh McLean.

The Swedish Steamer Indianic, with a cargo of lumber, was compelled to discharge her cargo at London, England, to a prize court recently, before being allowed to proceed on her journey.

The Mountain Lumbermen's Association, at a recent meeting held at Calgary, Alta., passed a resolution voting the sum of $5,000 for the purchase of machine guns to equip the 54th Kootenay Regiment.

Mr. A. F. B. Austin has been appointed manager of H. Bourgouin, wholesale lumber, 145 St. James Street, Montreal. Mr. Austin has been in the lumber business for twenty-five years, and was at one time manager of the lumber department of the C. P. R.

An action for damages brought by the Bull River Power Company, Cranbrook, B. C., against the Canadian Pacific Railway Company has been settled out of court. The power company claimed that the C. P. R. damaged their dam and flume by driving logs down the Bull River and by the use of dynamite. The C. P. R. leased the flume at $5,000 a year. According to the terms of the settlement the C. P. R. will pay $18,500 and all taxed costs.

As a result of the presence of the gypsy moth in certain parts of the United States, an order-in-council has been passed by the Government that forest plant products, including logs, tan bark, posts, poles, railroad ties, cordwood and lumber originating in the States of Maine, Massachusetts, New Hampshire, Connecticut and Rhode Island shall not be admitted into Canada unless accompanied by a certificate showing that they have been inspected by the United States Department of Agriculture and found free from the gypsy moth.

He Struck a Match

He struck a match as he passed through
The glorious growth of centuries;
He lit his pipe—and then he threw
The tiny blaze among the trees.
It flickered, seemed to die away—
And he, all careless, passed along,
Filled with the pleasure of the day,
The glory of the Forest's song.

Furious, wild-driv'n by the gale
That roared as Hell is thought to roar,
The forest fire swept hill and vale,
Claiming its victims by the score.
Huge flame-tongues covered every place
That even seemed to offer hope,
And devastation smote Earth's face:
No power, save God's, with this could cope.

Black are the hills where stood the trees
That graced them so short time ago;
No more their green boughs to the breeze
Sing gently, waving to and fro;
Black are the stumps and dry the rills
That yesterday so joyous went;
But blackest is it that these ills
Are suffered by the innocent!

—Carroll Wright.

Review of Current Trade Conditions

Ontario

The lumber trade in Ontario continues on a very quiet basis. There is nothing whatever in the way of change to report. The volume of country trade is small, depending very largely upon the demand from the farmers for material for alterations, new buildings, etc. The manufacturing demand is light, being chiefly for war materials. In the large cities the building trade is exceptionally quiet, although in some sections, where well-to-do people require new residences or alterations to old ones a fair amount of trade is in progress, on account of the low prices for which materials and labor can now be secured.

Hemlock manufacturers report very quiet trade. Hemlock prices have recently suffered considerably on account of competition of small mills which produce rather unsatisfactory stocks and are ready to dispose of them at prices below those which represent cost to the larger manufacturers. The latter are convinced that they should obtain $17 for No. 1 at the mill to-day, but this is a difficult price to get, for the reasons above mentioned. The small volume of trade in hemlock now going on could probably not be increased even if the price were dropped several dollars a thousand. People simply are not buying. Stocks of hemlock are reported to be light and for this reason it looks as though price cutting is entirely uncalled for. However, the situation exists, much as it is to be regretted.

Eastern Canada

There is nothing in the way of change to report from St. John, N. B. English deals have been moving off to a fair extent during the past fortnight and stocks are now very light. Prices are unchanged. Freights continue at the former high level, as high as 135s being still offered. Vessels continue scarce. The United States market is very quiet and prices are weak. Lath are selling at about $3.65 in New York or $2.65 on wharves at St. John. Shingles continue quiet and shipments are practically nil. The local building trade at St. John is also very quiet. Refuse lumber is slow and prices are being shaded. Practically all the logs in the St. John are now in the booms.

Reports from Boston indicate that the market for eastern spruce is a little firmer. Producers and wholesalers have been doing their best to bring the base quotation on frames back to $23 and have been successful in some cases. A recent conference of spruce men brought out the information that the production of eastern spruce is now 540,000 feet per day less than a year ago. The demand for random continues good. At New York 2 x 8 has been bringing $23, although at Boston $22 and $22.50 look high to the yard owners. Boards continue rather quiet and weak. The best covering boards, 5 in. and up wide, 8 ft. and up long, are bringing $20, although reports of $19.50 have been received. The demand for hemlock at Boston is rather slow, although prices show no further drop. Practically all manufacturers of eastern hemlock boards are holding to $20 as the bottom figure for clipped boards 10, 12, 14, 16 foot lengths. Eastern random boards are moving slowly at $19. The demand for shingles at Boston is quiet. White cedar extras are offered at $3.20 to $3.40. Clears are quoted at $2.75 to $2.90 and second clears at $2.35 to $2.45. The demand for lath is increasing and 1⅝ in. is a shade firmer in price, the usual quotation now being $4.05. For 1 ½in. lath the market is quiet at $3.60 to $3.70.

Great Britain

There is little alteration to report in the general lumber trade situation in Great Britain. Prices are as firm as ever and steamers are as difficult to obtain, even if one is willing to pay the high rates. The spread of the belief in a long war has been a noticeable feature during the past month. This is likely to have a definite effect upon the lumber trade and to work in the direction of increased inclination to undertake forward business. Assuming that another year will pass with conditions similar to those of today, it is natural to conclude that stocks ought to be purchased a little more freely. Any stocks under such conditions, that can be brought into England could be sold at a fair profit.

Imports of wood goods into Great Britain during June showed a falling off compared with June of 1914. Hewn timber decreased by 49,745 loads, whilst sawn and planed showed a falling off of 239,687 loads. During the six months ending June 30th hewn wood showed a decrease of 151,722 loads as compared with the corresponding six months of 1914. Pit props decreased by 102,031 loads, and sawn and planed goods showed a falling off of 270,170 loads.

An increased disposition to purchase forward stocks is noticeable in London. This is the result of the high freights now ruling. The season is getting on, and the consumption is still large, so that it begins to look as though towards the end of the year there will be a shortage of the most useful sizes in every day use. The deliveries at London docks for the week ending July 3rd amounted to 9,954 standards as compared with 12,736 standards during the corresponding week of last year. At Foy, Morgan and Company's recent auction sale 3 x 10 and up u/s Halifax brought £18 10s, 3 x 9 ditto £17 5s, 3 x 8 ditto, £16 5s, 3 x 7 ditto £16 and 3 x 6 ditto £15 15s.

Importations during June, at Liverpool, compared very favorably with the corresponding month of 1914. A considerable increase occurred in the imports of British Columbian and Oregon pine. Ocean freight rates continue at very high levels. From Montreal they are quoted at £8 per standard for future engagements, and £7 10s has already been paid. Moreover, the steamship owners will take only such quantities of deals, etc., as they can find room for, to keep within the limits of their charters. As a result, the imports for June amounted to 500 standards as compared with 1,070 standards for June of last year. The spruce deal c.i.f. market continues firm and offerings are light.

United States

Very little of special interest has developed during the past fortnight in connection with the lumber trade in the United States. The situation generally is of a quiet nature although somewhat spotty. The most noticeable feature in connection with the whole trade seems to be the importance of special demands. Railroad enquiry is a little more active. A few large orders have been placed and some are still to be placed, but for the most part the railroad demand is for small amounts to be used in making repairs. The railroads, moreover, are very canny purchasers, and work one set of mills against another to the best of their ability. The country retail yard trade continues to be the chief prop of the softwood business. A slightly improved condition is reported in connection with the yellow pine industry. Many of the mills are running very conservatively and some are shut down, so that the statistical position of the Chicago building strikes is a very gratifying development from the lumbermen's point of view. The export trade shows no developments during the past fortnight.

Lumber receipts at Chicago during the week ending July 10th amounted to 36,834,000 feet against 47,718,000 feet for the corresponding week in 1914. The total receipts from January 1st to July 10th amounted to 1,046,538,000 feet, a decrease of 147,896,000 feet as compared with the corresponding period of last year. Shipments for the week ending July 10th were 21,177,000 feet, an increase of 832,000 feet as compared with the corresponding week in 1914. The total shipments from January 1st to July 10th were 560,421,000 feet, a decrease of 3,687,000 feet as compared with the corresponding period of 1914. The trade in northern pine at Chicago has been fairly good, especially in the lower grades. At Buffalo the white pine trade is quiet and little tendency towards improvement is noticed. A fair amount of building work is going on, but substitute woods are used to a large extent. The best demand is for the common stocks, some of which are scarce and firm.

An Interesting Woodworking Plant at Prince Rupert, B. C.

In connection with the Grand Trunk Pacific drydock, now approaching completion at Prince Rupert, B. C., at a cost of $2,500,000, there is a fine woodworking plant, which has been utilized in the construction of the dock, and later on will be used for building and repairing vessels. The plant is situated in the ship shed, and comprises the following machinery: Timber sizer 20 ins. x 14 ins., No. 109 band saw 48-in. (resaw), bevel band saw 40-in., heavy wood frame saw table, pattern-maker's universal saw bench, No. 5 improved heavy automatic crosscut saw table 10 ft. 6 ins. long, No. 1 heavy power mortiser with boring attachment and clamp table, No. 2½ sash tenoning machine with double copes, No. 8 20-in. pattern-maker's lathe, No. 1 20-in. hand planer and jointer with spur cutter, No. 200 30-in. automatic knife grinder with pump, No. 2 emery grinder, No. 49 double surfacer 30 ins. x 12 ins., band resaw sharpening and filing set, Fox No. 6 universal wood trimmer to cut 6 ins. high x 19 ins. wide, and Fox No. 8 Universal wood trimmer to cut 8 ins. high and 24½ ins. wide. In the construction of the dock 4,000,000 feet of lumber was used for the pontoons, 800,000 white pine wedges for caulking the pontoons, and 3,000,000 feet of lumber for building the wharf.

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Deals Well Shipped Up

St. John, N. B., July 23rd (Special to the Canada Lumberman):—Very little change can be reported at the port of St. John since last writing. A good quantity of English deals has moved off during the last two weeks and at the present writing all available scows are being loaded at the mills for delivery to steamers now on berth. The mills at St. John have a very light stock of English deals on sticks, and if the present rate of shipment keeps up the stocks for wintering will be extremely light. Prices have not changed. In fact little can be said of prices for any English deals, as practically none are offering, although the commission merchants say that they can purchase and have been offered deals at from $13.50 to $15 per M. for 50 per cent. 7 and 8 x 3, balance 9 in. and up. Whether this is so it is not possible to verify. The freight market is not in any worse position than it was two weeks ago, although it cannot be said to have shown any great improvement. As high as 135 shillings is still being offered, but neither sailers nor steamers are offering in any increased numbers.

Five of the seven mills now operated at St. John are sawing for the English market. The other two are sawing logs cut for the American market which make a long average and should command a better price in their own market, but at the present writing this market is much demoralized. Price is not a question. The problem is to find purchasers, and if one is forced to sell he must do so at a price which will in most cases show a loss. 2 x 4 and 2 x 8, especially 2 x 8, are about the only sellers in evidence at all, and one could not net over $15 to $16 at the mills for this kind of stock. This, with the high price of logs and cost of sawing, would leave a balance on the wrong side. The Boston market shows no improvement. Boards are almost unsaleable, everyone is offering them in large quantities, rough, planed, matched, but very few buyers can be found. New York stands in about the same position as New England. House building is fairly active, but the larger purchasers, such as the railroads and manufacturing houses, are out of the market, and this throws the stocks that are offering in the one channel, which cannot absorb it. Prices for boards planed one side would to-day leave about $14 at the mills.

Laths have followed long lumber to some extent but not to the same degree, about $3.65 being the sellers' price in New York, which will leave about $2.65 on wharfs at St. John.

Shingles are in no better position than they were, and no shipments are being made from here. Some of the mills are overstocked with all grades, while others are cleaned up of the lower grades. Hemlock is very weak and few buyers can be found.

The box business is like all other trades, barely enough business can be had to keep the machines moving to capacity.

Locally, the building trade shows no improvement and unless some change takes place in the near future it will be about standing still. The mill owners have grown tired offering stocks at slaughter prices and have now settled down to await developments. Refuse lumber is slow and prices are being shaded to meet the credit of the buyer. If his credit is poor he still finds plenty willing to sell, which is not the case when times are good.

All the logs are now about in the booms. This has been a fairly good driving season on the lower section of the river, and as the water has kept up it has facilitated rafting more than it has retarded it.

Tonnage more Plentiful at Montreal

Montreal, July 23rd (Special to the Canada Lumberman):—No fresh developments have taken place in the lumber situation, except that with the scarcity of business, there is a tendency for prices to drop. Wholesalers are very keen to get trade, and some are inclined to reduce their profits in order to secure orders. Although the consumption of lumber for the building trade is poor, there is a fair demand for box making, the liberal orders for ammunition boxes being a feature which must not be overlooked. Sash and door factories are very quiet.

Some good business for spruce for New York is reported.

Shipments to the United Kingdom are now proceeding at a very satisfactory rate. This is due to the scarcity of grain, consequent on which the shipping companies are offering large amounts of space, but at the high price of 150s. per standard. Shippers are sending as much lumber as possible, as with the new grain coming on, it is probable that tonnage will again be restricted in the fall. One Allan boat has taken on a full cargo of lumber.

Ground wood is an easy market, the Canadian mills being fairly well employed. Sulphite shows no change in values. The imports from Europe to the United States have declined, and this has kept prices firm. Quotations in England, however, have advanced, owing to the difficulty of securing supplies from northern Europe and the higher cost of production there. The Canadian newsprint mills are doing a good business, with substantial orders coming from Great Britain, Australia, and South Africa. The Laurentide Company's extensions are proceeding at a good rate, the new power house and ground wood mill being constructed.

A party of American capitalists have visited the plant of the North American Pulp and Paper Company at Chicoutimi and at Chandler, P. Q. They went by way of Montreal, Quebec and Levis. Mr. J. E. A. Dubuc, the president, entertained the company at Chandler.

Work has been resumed at the plant of the Donnacona Paper Company's mills, where a sympathetic strike caused a shut down for several weeks. New employees were engaged, and the mill is now turning out its normal amount of newsprint.

Ottawa Mills all Busy—Water Plentiful

Ottawa, July 22nd (Special to the Canada Lumberman):—Trade conditions have not altered lately and the prospects are that there will be little variation for some time. At present all the mills in the district are working and the water is fairly plentiful. It looks as if there will be no trouble owing to the lack of water this year.

Another big fire visited the yards of Gilmour and Hughson, Hull, P. Q., two weeks ago, and destroyed nearly 200,000 feet of pine valued at over $6,000. The loss was covered by insurance. Prompt and effective work of the Hull and Ottawa fire brigades prevented the loss being greater and saved neighboring property from being burned. It is not known what caused the fire, but it is believed to be the work of an incendiary. There have been several large lumber fires in the district during the past year, nearly all of which were deliberately started. A close watch is being maintained by a special staff of watchmen and the Hull police.

The Militia Department has just received a donation of $5,000 from the Mountain Lumbermen's Association of British Columbia for the purchase of machine guns, which will be supplied to the Kootenay Regiment. Recently the Department announced that future contributions to the fighting strength of the Empire would be best in the form of machine guns so the M. L. A. acted accordingly. It is interesting to note that among the members of the association are several lumbermen in the United States who readily subscribed to the fund for the purchase of the guns.

Two well-known men prominent in lumber circles have been appointed to act on the Canadian hospital committee which will have charge of caring for convalescent soldiers returning home from the front. They are Sir Rodolphe Forget, of Montreal, and Mr. F. W. Avery, of Ottawa.

An unusual claim for damages was made against the E. B. Eddy Company, of Hull, P. Q., last week, and the trial judge gave judgment for the plaintiff. Bailiff J. E. Couture, of Hull. While walking down the main street of the city, one of the company's heavy motor trucks passed by, and, he said, splashed some mud all over his clothes and person. He entered a claim for $28. The company contended that the corporation was responsible for having the street in a muddy condition, but the judge ruled otherwise.

No intimation of when the judgment in the Eastern Freight Rates case will be handed down by the Railway Commission has yet been given, but it is understood that early in August will see it made public. It is being eagerly awaited by the lumbermen in Ottawa and throughout all Canada.

The largest single log ever taken out in the Fraser Valley was shipped recently when a 110-foot stick two feet in diameter was loaded on B. C. E. R. flat cars, says a B. C. report. It took three cars to carry the log. The log measured two feet all the way through, varying but a few inches at either end.

Canadian Timber for Italy

A communication has been received from a firm in Milan which further amplifies the article appearing in Weekly Bulletin No. 583 on the possibilities for the importation of Canadian lumber into Italy.

J. & D. A. Harquail

Company, Limited

Manufacturers of Lumber

Extensive New Brunswick and Quebec timber limits, abundant with Virgin Spruce, Pine and Hardwoods.

Twenty years' experience in Milling and Manufacturing, together with a practical knowledge of Building and Architecture, is why our Customers tell us that the Dressing, Grading, and Manufacture of our Stock is just a little better than they expected.

Large stocks of 1 in. Spruce Lumber always on hand.

Try a car of our Air-dried Dressed Spruce.

We also make a Specialty of Kiln Dried Stock.

Our personal attention given to every detail.

Write, wire or phone us for quotations.

Established 1894 ***Incorporated 1908***

Campbellton, New Brunswick

It is stated that the present is an opportune time to sell in Italy large quantities of deal-wood (spruce) from Canada. Generally speaking Italy receives large quantities of deals, in boards and planks as well as in logs, for sawing, from Austria-Hungary, Roumania, Germany, and Russia. On account of the present disturbed conditions, however, Austria-Hungary and Germany have suspended their export of wood supplies to Italy, and Roumania and Russia from the commencement of the war have not been able to ship timber.

On account of the fact that Italy produces very little of this kind of wood, and as the consumption is large, the present time would seem to be favorable for an attempt to introduce Canadian timber into Italy. The most saleable quality would be the mercantile one, and the measurements would be as follows:—

Thickness.—From 12 millimetres (15/32 of an inch) and upwards, more especially 18 millimetres (23/32 of an inch) and 24 millimetres (15/16 of an inch).

Length.—Possibly 4 metres (13 feet 1½ inch), nevertheless greater lengths would be accepted.

Width.—From 10 centimetres to 18 centimetres (from 3 15/16 inches to 7 1/6 inches) and from 19 centimetres to 40 centimetres and upwards (from 7½ inches to 15¾ inches and upwards).

Any Canadian lumber manufacturers who wish to communicate may obtain the name of the firm in question on application to the Department of Trade and Commerce, Ottawa. (Refer file No. 1661).

Glasgow Market Report

Messrs. Edmiston & Mitchells, Glasgow, in their quarterly timber circular, under date of July 1st, report in part as follows:—The market during the last three months has developed a somewhat dull tendency, a contributing factor being the continued high cost of timber of all descriptions, though this, no doubt, is only one of the many causes. The local timber trade has for so long been largely dependent upon shipbuilding requirements as an outlet for stock that now with so many of the yards restricted to the production of war material requiring little or no timber, there has been an inevitable shrinkage in orders from this source. Nor has the trade had any appreciable assistance from the housebuilding trade, which is as dull as ever, and it appears certain that no revival need be looked for in this direction until the war is over. The furniture trade has also been far from busy, more particularly in the case of high-class goods, and as a consequence the consumption of mahogany and hardwoods generally has been somewhat disappointing. Fortunately the packing case industry has continued to be moderately well employed with War Office requirements and general export orders, which has helped to maintain the demand for spruce. Wagon builders have also been busy and have accounted for a steady consumption of oak planks, of which the imports from America have been on a fairly liberal scale recently, though not, however, in excess of the demand. A result of the high import cost has been to check any tendency towards speculative buying, which at a time like the present is probably rather beneficial than otherwise to the trade generally.

As regards prices, there has been a decided pause of late in the upward movement, and in some directions they are only maintained with difficulty, due not so much to heavier imports as to lack of demand, and pressure to sell to avoid storage expenses.

As to the freight outlook, the present tendency is downwards, especially for grain cargoes, but it cannot be said that there is any noticeable weakness so far as timber is concerned. In the present abnormal position of affairs brought about by the war, it is almost useless to hazard an opinion as to whether the depression may make further progress, but assuming the latter contingency, cheaper timber rates would follow as a consequence. The consumption has very considerably exceeded imports during the first six months of the year, though, as compared with last year's figures over the same period, they show a material shrinkage. Taking the present stock of timber against that at 30th June, 1914, there is quite a big drop, while as compared with 31st March, 1915, there is a shrinkage of nearly 8,000 loads.

Imports from British North America

Waney pine logs—There were no transactions of any importance recorded in 1st class timber, but there was some movement in 2nd class wood and also in Siberian pine logs for special Government requirements. The demands for this purpose having been fully covered, there is now little or no enquiry in evidence.

Oak logs—Rather more enquiry has existed, and one of the local railway companies is at present in the market and will probably take up all the available 1st class wood of good average size, and also some of the small 11-in./12-in. timber, of which there is still a considerable stock on hand. Values have ruled firm.

Elm logs—A moderate business has passed in 1st class rock elm of large average, and there is some little enquiry at present in the market for forward delivery. The movement in small wood, 2nd class and soft elm, was of a decidedly limited nature. The stock on hand consists of 1,214 logs, and averages 39 C. ft. per log.

Birch logs—The import consisted of 1,933 logs Quebec and 81 logs Low Port timber, mostly in fulfilment of contracts. A fair demand exists, but buyers are showing a disinclination to respond to shippers' ideas of values. Lumber—Planks have met with moderate request at values which have kept very firm.

Yellow pine deals and sidings—Business in deals has been of a restricted nature, and entirely confined to the lower grades. In sidings a few sales were reported in unassorted quality 1¼ ins. to 2 ins., and in shelving boards 8 in./12 in. x ⅞ in. and 1 inch. There was little doing apart from this.

Spruce deals—The consumption has maintained a fairly steady pace, although latterly the demand has quieted down somewhat. Supplies have come forward comparatively freely, and there has been some necessity to resort to storing of late. Values on the whole have continued on a steady basis.

Replacing Old Equipment

One of the important duties of the salesman who handles shop and factory equipment lies in the education of customers in his effort to sell them new tools to replace those that are less efficient. With the rapid progress in the design of machinery of all classes, there are few manufacturing establishments presenting no chance for an argument along these lines.

But the greatest opportunity lies in some of the older works. It is almost an anomalous condition that an occasional plant makes money in spite of the fact that its machinery is far from modern, and its cost of manufacturing is necessarily much higher than it would be were the same work done under advanced methods.

Such a condition may be capable of explanation. The reputation of the goods, long experience, and resultant excellence of design, which may put a product in a class by itself; the skill of the sales department—any combination of these and other factors may serve to overcome disadvantages at the manufacturing end of the business.

But the observer cannot fail to see how much more profitable a business would be, with all other elements as advantageous as before, if old equipment, which in many instances may be classed as obsolete, were replaced by the best that modern mechanical art has evolved for the various required purposes. Almost always, these cases occur where the business is an old one, directed by the same influences that have controlled it for many years, and housed in old buildings. The experience of such a management is a large item of value in itself, as an offset to the failure to make improvements.

Improvements Caused by Fires

A new management that would modernize the works would perhaps lack other valuable qualities begot by long acquaintance with the product and its market. It becomes almost an ideal condition when a veteran management establishes new works, with new machinery, cheaper power, cheaper insurance because of lessened fire risk, better light and sanitatary surroundings; a change that comes usually after a serious fire.

The salesman often sees the opportunity for a larger order in looking about an old but prosperous shop or factory, and undertakes the education of those in control in the effort to sell new machinery. It is frequently true that a new machine will pay for itself in a short time by the saving in cost of production as compared with the tool which it supersedes. To establish this fact to the point of an order is one of the difficult experiences in selling machinery.

But it is well worth the while to keep up the effort, for to the conservative management that has finally made a start on a policy of improved equipment the advantages in money saved become too apparent to be passed by, and more or less quickly the modernizing of the plant will be carried out, or new works erected.

This is especially true where the manufacturer has a cost system sufficiently exact to give him the precise figures of his saving. There is no doubt that the cost system is one of the most important factors in bringing about radical improvements in manufacturing methods, and those who are benefited in the market by such changes could do less important missionary work than to equip themselves to be able to point out intelligently improved systems of ascertaining costs of a product in its various operations.

If by installing a sample machine it can be demonstrated that the cost of an operation can be reduced one-half or three-quarters or even more, then few successful business men, even if they are not easily converted to the progressive ideas of the present day, will fail to be strongly influenced.

It is not the whole story to show that a machine will perform a certain operation on twice as many parts in a given time as did the older tool. The demonstration of costs should go beyond this; the elements of the item of labor and of the various factors that enter

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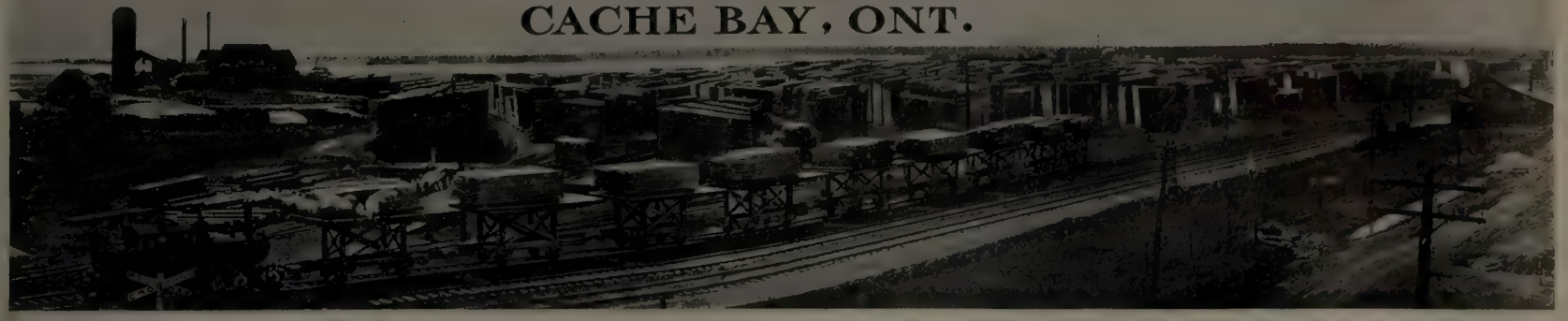

Bird's-eye view of Mills and Lumber Yards

The mill which appears above was burned on July 19th. Our other mill is still running day and night. Our planing mill and yards are intact.

White and Norway Pine

CONTINUE TO SEND US YOUR INQUIRIES FOR DIMENSION TIMBER, DEALS, ROUGH AND DRESSED LUMBER IN ALL SIZES AND GRADES.

George Gordon & Co.

Limited

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into general expenses should all be figured in the comparison, to emphasize the economy effected. The education of customers is a common enough practice, but we believe it is seldom accompanied by the effort to place a parallel of exact costs, the most convincing argument of all.

Where it is possible to install a machine on trial, a plan more feasible, of course, with light than with heavy tools, much good is accomplished providing the builder of the tool can back up his claims with results.

It is also possible to get from some manufacturer who has had the experience of the change to the new type of tool under similar conditions, abstracts from his cost system showing exactly the difference in manufacturing expense that resulted.

The Wholesaler's Importance*

By Geo. J. Pope

Some few months ago while on a trip, I read one of George Ade's fables. The central figure was one that Mr. Ade saw fit to describe as "A Decent Wholesaler." This phrase has lodged in the back of my mind ever since. There are decent wholesalers and they are a necessary and perfectly legitimate part of the industry.

As Artemus Ward might have put it—"why is a wholesaler?"

Customs change in every line of business, and the game that was played thirty years ago is not possible to-day. Volumes could be filled with what has been written about the wholesaler, and I think he has been charged with all the troubles incident to the business. He is, according to some, responsible for low prices and everything else from car shortages to the chestnut blight. Yet, in spite of criticism—some of it just and more of it unjust—this branch of the business continues and it expands.

A business that is not founded on good economic principles cannot endure. If it has no place in the general scheme or plan of things it will fall of its own weight; if it has its place, that fact will soon be demonstrated.

Time was when Chicago had some ninety distributing yards, and the product from the northern states found its way here and was distributed by rail everywhere. In 1862 there was not one jobber or wholesaler in Chicago. In 1888 there were a few. To-day the capital invested in this line, using the lowest capital rating and eliminating the yards that maintain a jobbing department, and all outside wholesale concerns that merely have branch offices here, is upwards of four and one-half million dollars, and this same expansion has gone on elsewhere. In Minneapolis, St. Louis, Pittsburgh, Cincinnati, Philadelphia, Cleveland, Omaha, Boston, in fact in all large centres, the wholesaling of lumber is carried on.

A Force to be Recognized

It is foolish to assume that a business which has grown to such a magnitude is a parasite. It is a force which must be recognized, and the sooner this is done in an intelligent manner the better for all concerned.

There is a general feeling that the trade papers usually reflect the attitude of the sawmill men. There is nothing wrong in this. In fact, I believe they should work more for the interest of the manufacturer than for anyone else, but it is unfortunate that at times articles appear in print that tend to show that the interests of the manufacturer and the wholesaler are hostile rather than reciprocal.

A short time ago an editorial in a lumber paper predicated on two letters from a manufacturer, had quite a little to say about the "scalper or so-called wholesaler." I quote as follows: "There is only one way for the producers of lumber to raise their prices, and that is by refusing to fill orders at the disastrous prices handed out to them by the so-called wholesalers. We should face about with the determination to get cost at least out of our product, and turn down all orders that will not give us at least a reasonable profit."

This is good stuff and good sense, a little further on is the following: "wherein, or by what right the scalper or transit man exist as a part of the scheme of economics in the lumber industry is hard to ascertain." In closing, this article says:—"There is no law that compels a manufacturer to sell his wares below the cost of production; there is no law that compels him to foster an evil that is not an economic necessity. This being the case it is hard to reason why the second great industry of the United States should buy automobiles, diamonds and wine for the outlaws of the industry." The article is all along the same line. It does not attempt to differentiate between the responsible and irresponsible. Seemingly it classes as undesirable citizens all wholesalers of lumber. I do not care to make any extended comment on this article except on one point, and that is, transit cars.

The Little Sawmill's Influence

There are a world of little sawmills. They cannot carry their own accounts nor have they any selling organization, and they must sell, as a general rule, through the wholesaler. They have just as much right to be in business as the largest producer and just as much right to transact business their way as you have yours. They cannot take on orders for future shipment or for specified amounts of certain grades. As soon as they have a car ready for shipment it must move, and there is no better way for it to move than through the wholesaler. As the large mills cut out, the little mill appears—he is the gleaner at work after the harvest is over. I am not defending the transit practice; personally, I do not like it, but I am giving you one of the many reasons for its existence, and you may rest assured it will never be discontinued. As this article says, there is no law compelling a manufacturer to sell his output for less than he deems it worth, but there is an unwritten law greater than any other, which does fix his prices, and that is, the law of supply and demand. As to the diamonds, wine and automobiles, I will venture a guess, if the last twelve months' profits have bought them, any wholesaler who wears the first, has a stone decidedly off color; if he has imbibed the second it was, at best, Cook's Imperial, and if he drives the third, it is one of a well-known make that is turned out at the rate of one a minute.

I am pleased to state that in a later issue this paper printed an article on the same topic in which all credit was given to the Decent Wholesaler. Its statements and arguments are so closely allied to what I will say to you that I almost wondered if I had not written it myself. My point is this:—the two articles should have been combined in one, as without the second it would appear that the publication quoted from was unalterably opposed to the wholesaler and was reflecting the ideas of the manufacturer through its columns, and so helping to foster what might be termed an armed neutrality, when in reality the wholesaler is more interested than anyone else in purging from his ranks the undesirable, realizing that he cannot help but suffer for the sins of another.

One reason for the wholesaler and one which may surprise some perfectly good mill men is that many of the largest consumers in certain lines prefer to buy from him. They are more sure of their deliveries. A mill may have an accident; a shut down because of fire or high water, or any one of the innumerable troubles with which we are familiar. This is a perfectly legitimate reason for non-shipment from a mill point of view, but the wholesaler merely considers it as one of the incidents of his business and replaces, usually at a premium, for immediate shipment.

Ready for All Kinds of Orders

It also happens that at times an order for certain stock is desirable for a mill and sometimes it is not. Some orders are for large quantities of the same grade and this is not always good business for the producer. The wholesaler, however, is always ready, through his connections, to sell any bill tendered him—he always has it in stock.

You will find that the buyer, and particularly the larger buyer, sticks pretty close to the man who has made a study of his requirements, and who is equipped to give him what he wants when he wants it. A good seasoned shipper who knows the buyer's needs is as valuable to him as a good customer is to the mill man.

One of the primary reasons for the wholesaler is the distance of the buyer from the source of supply. Some of the large operators can afford to maintain selling offices in the buying centres, but this is not practical for the majority of mills, and as the man on the spot usually gets the preference, other things being equal, the mill without representation suffers.

We find in Chicago that one of the greatest disturbers of values is the mill representative that comes along once or twice a year with a lot of lumber for sale and no definite knowledge of who would naturally be in the market for it. He works hard, usually leaves a trail of low prices behind him, and the last man he calls on is the wholesaler, who naturally shows little interest when he learns the stock has been peddled all over town. A wholesaler could offer this same stock and the buyer think nothing of it, as it is a part of his daily business; but when three or four representatives of mills call on a buyer who has never had any previous dealings with them, the best they usually get is a mark to shoot at. The buyer says he is not in the market but would take in a little plain red oak at enough under the going price to pay him for carrying it, etc., and after three or four such experiences the salesman usually falls for it, and a new low price is established. I have sold lumber all my life, and know just what a salesman in a new territory is up against. Our own mill, and I allude to it only as an illustration, sells exclusively to wholesalers; I know by experience that the wholesaler in Boston can get better prices and handle the trade more satisfactorily than I can by direct solicitation.

One reason why the mill man and the wholesaler do not co-operate more is that the wholesaler in many cases feels he must protect his trade. He believes that he is constantly spending his time and money educating the sawmill man as to marketing his stock without a fair consideration being shown him. Again reverting to our own experience, when in Philadelphia last summer I called on the trade direct with one of our wholesale friends. This man talked our lumber,

*An address delivered before the National Hardwood Lumber Association at Chicago.

For Lumbermen and Woodworkers

In every lumber camp "Asbestol" is the favorite, because "Asbestol" gloves and mittens are made for the hardest kind of service. They are guaranteed to stand all reasonable tests of heat, steam and water.

When you buy work gloves be sure you find this diamond-shaped trade mark :

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CELEBRATED
HORSE HIDE

—our guaranty that the goods are worth the money.

DEALERS—"Asbestol" gloves and mittens are sold through the better wholesale houses. Your wholesaler carries "Asbestol." Call on him to-day for an introductory stock.

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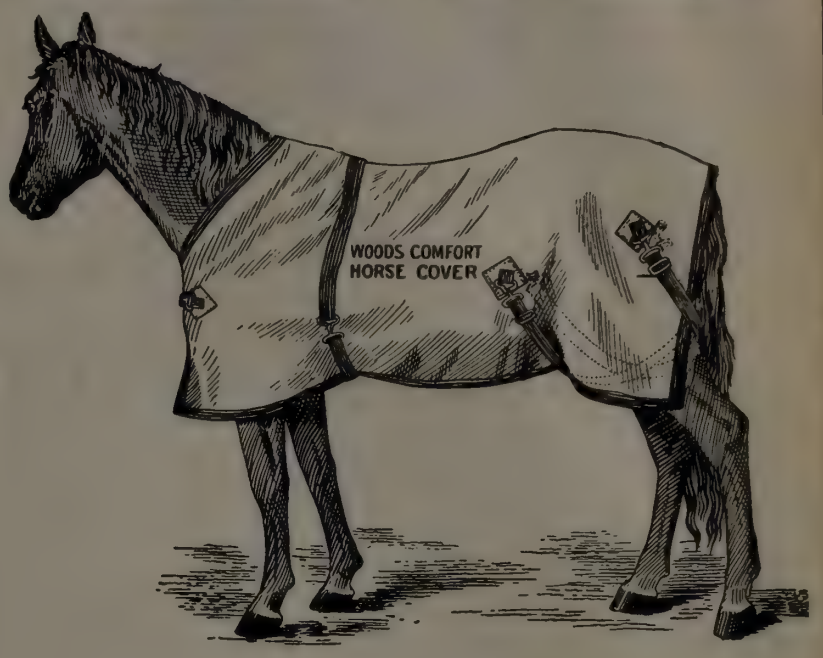

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advertised our lumber, and while he knew that some of his competitors also did business with us, yet he knew that at no future time would the buyer be solicited direct. He had a fair field and no favors, and that is all the decent wholesaler asks, and it is too often more than he gets.

A wholesaler makes a trip south, visits many mills and thoroughly acquaints himself with stocks and the class of orders the mill man wants. He may buy what he knows will fit the requirements of certain buyers, and then works hard to introduce the lumber. It is satisfactory, and repeat orders follow. If, as mill men, you begrudge him the profit his work and knowledge entitle him to, if you try to cut him out and deal direct with the customer he has created, you are not giving him a square deal, and he will soon lose interest in you and find another mill to supply his needs. He is a persistent fellow and probably a friend of the buyer, and as soon as he is properly lined up the trade is again his, and the mill man is forgotten, as there is nothing like personal contact to hold trade.

The Wholesaler a Natural Price Booster

The wholesaler is a natural booster of prices; the minute he buys a block of stock, that minute finds him anxious to increase selling values. He usually knows what the traffic will stand and tries to get a shade better than the going prices.

There exists an impression in some minds that the wholesaler is used by buyers to depress values. It is not policy for the wholesaler to buy too cheaply, there are too many decent competitors who are trying to line up his source of supply, and the interests of a good shipper who is friendly to him must be conserved or the account will go elsewhere. It is a mistake to think that all buyers like to see prices slump. In any factory, values of the output are predicated on the cost of material plus the cost of production. Many such concerns, particularly those using hardwood, keep large supplies on hand. This buyer does not relish knocking three or four dollars off the cost values on his inventory; he would much rather know that his lumber has not cost him more than a fair average price and that it is worth the money he paid for it. A weak and dropping market is always an unsatisfactory one for all concerned. The buyer never knows when bed rock has actually been reached, and one of the first signs of trouble he has been taught by experience to recognize, is when a baker's dozen of sawmill representatives who are strangers to him, personally solicit his business.

There is another angle to this wholesale game, and it is a game, and an interesting one, too, and that is the matter of inspection. The members of this organization have an inspection department that stands, I believe, nearly one hundred per cent. as to efficiency. But how about the mill that is not a member, and has a complaint on his car of quartered white oak at Grand Rapids or some other place a thousand miles away? If he has sold direct he takes what he can get; if sold through the wholesaler, and I am of course referring only to our friend the decent wholesaler, the claim is investigated, as it is his lumber that is being complained of. If the complaint is just he settles it; if he cannot effect a fair settlement he disposes of the stock elsewhere, and the mill receives pay for just what is shipped. The wholesaler has given his time and spent his money, and he considers it a part of the legitimate expense of doing business and just as much a part of his obligation as paying for his purchases.

The Wholesaler a Financier

The matter of finance is another reason for the wholesaler. The little mill referred to must have his money as soon as a car is shipped, otherwise he cannot operate. As a general rule the wholesaler pays at least 80 per cent. on receipt of invoice, and sometimes more. The consumer pays after the car is unloaded. There are times when the wholesaler supplies capital to the large mills. The big operator has quite a game to play. He has a lot of timber, sometimes paid for and more often not; a big investment in mill, plant, etc. Add to that the burden of carrying his stock on hand, and say an average of sixty days accounts, and it figures up quite a tidy sum of money. Until the turn comes for him what better plan can he adopt than to get a permanent advance on stock on hand and ship to a wholesaler that discounts? This plan, as you know, is common enough to occasion no particular comment. It is good business; it leaves the manufacturer free to give his undivided time to study economy in production, and his big profit comes in time with the increased value of his stumpage, which is all there is anyway for the manufacturer, as there is rarely a time when the mere physical act of turning saw logs into lumber shows much profit if the timber is charged to the mill at its market value rather than its cost price.

I have endeavored to show some reasons why the wholesaler is in business, and why he always will be. As long as he is an established factor how can he best serve the trade? He occupies the peculiar position of standing between the producer and the consumer, and he has not only to know his markets and his customers thoroughly, but to be a diplomat as well. I believe that certain European powers could well afford to pay high for the services of some of them that Clancy only rates C. 1½. The wholesaler is the man that has to smooth over the shipment of half dry stock that the mill man forwarded because he needed the money—he is the man that tries to show the consumer that business is actually better, and that lumber really is worth more money, and just as fast as he can advance his prices, competition in buying compels him to pay higher prices to his mill connections. He cheerfully takes the cussing that comes from some irate buyer when he individually is in no way at fault, and he is an adept in the art of pouring oil on troubled waters. He does not expect his path to be strewn with roses, but often wonders why it is necessary to encounter quite so many thorns.

The Mill Man's Best Friend

I believe that in a large market, a mill, unless represented by a good resident salesman, will get better results by having its stock sheet and prices in the hands of some good wholesale concern and giving them fair and equitable treatment, than in any other way.

I believe that as mill men, when you meet up with the decent wholesaler you should cultivate him and stick to him. I believe that as wholesalers, when you get an account started with a good mill you should stick to that mill and give them the benefit of your knowledge of the markets and mark up your prices to them as fast as conditions warrant.

I believe that as wholesalers when you are handling a certain stock and times are bad and prices worse, the casual opportunity to buy at under the market should not always be taken advantage of if your own connection needs the business.

Life is nothing but a give and take proposition from the cradle to the grave, and the man, be he a wholesaler or manufacturer, who is always looking for the best of it soon becomes marked and usually gets the worst of it. As you have been told at this meeting, co-operation is better than competition. A certain wholesale concern on the west coast says in their advertisement, "Our effort is to provide a responsible distributing service at the lowest cost consistent with business principles."

I do not know of a better definition of the wholesale dealer than is expressed in those few words, "a responsible distribution service at the lowest cost consistent with business principles," and I hope and expect as time goes on, these two most important branches of the trade, the manufacturer and the wholesaler, will join hands and work more and more for a common cause, each striving to learn from the other and each endeavoring to help the other, and when they meet let them meet with open and receptive minds, realizing that what benefits one helps the other.

The Individual Regulation of Hardwood Production

An address delivered by R. B. Goodman before the National Hardwood Lumber Association

We have all heard of the plans that are being developed for extending the use of lumber, we are all familiar with the promotion work carried on by the regional manufacturing associations for the promotion of individual kinds of lumber.

These advertising campaigns are bringing results and the splendid work that is now being planned of national scope to increase the consumption of lumber is a credit to the industry.

Nevertheless, we must remember that the development of consumption is one-half the problem—of equal importance is the regulation of production.

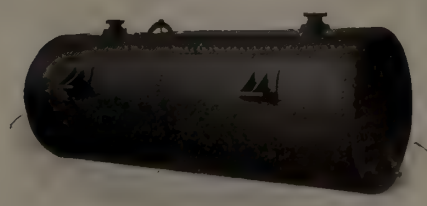
The peculiar nature of the lumber industry and its peculiar defect is that there are so many influences in it tending to over stimulate production—chief among these influences are: the growing cost of carrying stumpage; the decreased cost of manufacture, when running at full capacity; the popular belief in lumber profits, which is constantly building new mills; and the progressive and optimistic spirit of lumbermen themselves. So strong are these influences that a few lumbermen believe that the very efforts now being made to develop the use of lumber are liable to stimulate its production to as great, if not even to a greater degree, that it will develop increased consumption. At any rate there is equal urgency in promoting a national agitation for the adjustment of production to the actual demand instead of to the high level of past years, or to the anticipated level of more prosperous future conditions.

Such an adjustment is sound economics, benefiting the producer, the wholesaler, the manufacturing consumer, and the public generally; for the reasonable regulation of production insures reasonable prices with the elimination of those extreme fluctuations that are the disturbing factor to all elements of the lumber trade alike, so that the work now being done to bring about a reasonable regulation of production is constructive and progressive in the highest degree.

Fortunately for us this problem is comparatively easy in the hardwood industry. Most of the forces tending to over-stimulation of production are inoperative in this field—in fact a careful economic study

(Continued on page 52)

Jenckes Boilers



We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

The Jenckes Machine Co., Limited

Sherbrooke Montreal Cobalt So. Porcupine St. Catharines Toronto Vancouver Nelson

128,350 Laths

In Ten Hours

Our Lath-Mill and Bolter have made a test cut in ten hours of 128,350 four foot laths, 1½ in. by 3/8 in., counted, tied and piled.

We also make a full line of Lath-Mill and Picket-Mill Machinery, for mills, both large and small.

A Few of the "400" who use Payette's Lath-Machinery:

Graves, Bigwood Co., Byng Inlet, Ont.
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Georgian Bay Lumber Co., Waubaushene, Ont.
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Theo. A. Burrows, Grand View, Man.
Wm. Milne & Sons, North Bay, Ont.
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EXCELLENT PLANING MILL FACILITIES
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HEMLOCK SPECIAL
I offer the following Dry Hemlock for prompt shipment
220,000 ft. 1 x 4" & up 10/16 ft. piled separate widths
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EDGINGS

Ontario

The lumber mill of the Canadian Pulp and Lumber Company, located at Latchford, Ont., was totally destroyed by fire recently and a large number of men were thrown out of work.

The Dunbar Lumber Company, Haileybury, Ont., recently suffered a heavy loss by fire, resulting in the destruction of their yard situated near the T. & N. O. Railway station. The loss is estimated at $15,000, and is insured to the extent of $4,500. Mr. Dunbar has not yet decided whether he will rebuild.

The Peterborough Lumber Company, Limited, Peterborough, Ont., reported under date of July 17 that their drive from Scott limits would soon be in Peterborough, having made rapid progress. This is considered to be the best and largest cut of logs and dimension timber of its kind yet taken down these waters.

T. J. Roussel & Son, 78 Nightingale Street, Hamilton, Ont., report that the recent fire at their plant was casued by lightning. The loss amounted to $5,600, and was fully covered by insurance. The plant has now been rebuilt, with several improvements. In the upper storey new equipment has been installed and the plant is now running to full capacity.

The Rodney Woodenware Company, Rodney, Ont., who suffered a loss by fire amounting to $6,000, on which there was $4,300 of insurance, about two months ago, were again visited by fire on July 10th, when their loss amounted to about $3,200, being confined to destruction of stock. Insurance was carried to just about cover this amount. The company suspect that the fire was caused by boys or tramps smoking in the yard.

On July 19th the large saw mill belonging to Geo. Gordon and Company, Limited, at Cache Bay, Ont., was destroyed by fire. The fire occurred at 11.40 a.m. and spread rapidly. The loss is estimated at $125,000, on which there is $83,000 insurance. Fortunately, the wind was blowing away from the lumber in the yards and the large stock on hand was saved. The company report that their other mill is running night and day and they are in a position to fill all orders. They have not yet made plans for replacing the burned mill.

Eastern Canada

The Martinon Lumber Company, St. John, N. B., has been incorporated.

The Estate of Domina Dupuis, Hull, P. Q., lumber dealer, has been succeeded by Boucher Bros.

H. Boulay, M. P. for Rimouski, who recently lost his sawmill at Richards, N. B., by fire, will rebuild.

George Hooper, New Salem, N. S., has moved his mill from Springhill Junction to Lower Maccan.

P. H. Renaud, Agnes Street, Megantic County, Lake Rush, P.Q., is contemplating the erection of a sawmill.

Messrs. Leger, Bourgon & Ladouceur, Montreal, P. Q., have been registered. Among those interested are P. Leger, F. Bourgon and D. Ladouceur.

The sash and door factory belonging to Zenon Charbonneau, Alice Street, Montreal, P. Q., was recently destroyed by fire, the loss amounting to $20,000, and the insurance $7,000.

The sawmill belonging to Theo. Beaudouin, West Broughton, P. Q., was recently destroyed by fire, the loss amounting to $8,000. The owner will rebuild and new machinery will be required.

The Berwick Planing Mills, Berwick, N. S., owned by J. W. Hutchinson, were destroyed by fire on July 15th. The loss amounted to $10,000 and included a quantity of lumber. There was no insurance.

A large quantity of pine deals was recently destroyed by fire in the yards of Gilmour & Hughson, Hull, P. Q. The loss was covered by insurance. The latest figures place the loss at 200,000 feet, valued at $6,000.

The sash and door factory of Zerron Charbonneau, Alice Street, Montreal, has been burned out. The mill was a two-storey building of brick and wood construction. Mr. Charbonneau has an insurance of $7,000, but estimates the machinery and stock to be worth $17,000.

A serious accident was narrowly averted at the J. B. Snowball Company's plant, Chatham, N. B., recently, when it was discovered that some fiend had cut the main driving belt in the plant very nearly through. The cut was so made that had the power been turned on the belt would have given way and the machinery would have run wild.

A heavy fall of rain caused a rapid rise in the river at Dixville, P. Q., recently. The flood caused much damage to the sawmill of J. B. Barker. The timbers in the bulkhead became loose and went out, taking with them practically all one side of the mill and part of the machinery. Several thousand feet of spruce logs which were in the pond also went down the river.

The Miramichi Pulp Mill at Chatham, N. B., was completely destroyed by fire on July 19th. Only the office building remains. The loss is estimated at

$50,000, which is partly covered by insurance. The pulp mill property was owned by the Dominion Pulp Company and had not been operated during the past five years. The mill was equipped to produce 75 tons of pulp per day.

G. H. Houldsworth, South Bolton, P. Q., reports that the fire at his sawmill at Sally's Pond, N. B., on June 9th, which was recently reported in the Canada Lumberman, destroyed his sawmill, planing mill, dry kiln and outbuildings, together with 400,000 feet of lumber. The loss amounted to about $20,000, on which there was no insurance. Mr. Houldsworth does not intend to rebuild.

A chapter of accidents winding up with a serious fire resulted in the complete destruction of the sawmill belonging to Wm. Sullivan at Redbank, near Newcastle, N. B., recently. The actual cause of the fire is not known, but it is thought to have been the result of the belt on one of the saws slipping when the saw was blocked by a difficult log. The only warning the workmen had was the smell of burning rubber which was almost immediately followed by a great explosion. Presently the mill was in flames and almost before the workmen could escape, the driving belt was burned in two and a second explosion far greater than the first occurred. The wheel of the 350 h.p. engine, when released of the belt increased its speed enormously, expanded and burst into pieces, demolishing the building and its contents. Fortunately there was no loss of life. In addition to the sawmill, a quantity of pine boards and deals was destroyed. The loss to Mr. Sullivan is severe, particularly as he had a lot of work planned for the mill this season. He was able, however, to put the men at work at once on a night shift at his Nelson mill.

Western Canada

Messrs. Patriarche & Tennant, Winnipeg, Man., have been succeeded by Hugh R. Patriarche.

The Skeena Timber Company, Limited, have removed their office from Toronto to Vancouver.

A New Westminster despatch states that a large sawmill will be erected at Seal Cove in the near future.

The sawmill of the Edmonton Lumber Company, Edmonton, Alta., was swept away by recent floods and is a total loss.

The new mill of the Edgewood Lumber Company, Castlegar, B. C., is running at full capacity and cutting an average of 70,000 feet per day.

The Otis Staples Lumber Company, Limited, Wycliffe, B. C., made a late start at their mill this season, but are now running to capacity. Over 150 men are employed in the firm's logging camps in addition to the large mill gang.

A report from Dennison, B. C., states that a logging railroad about a mile in length from the mill to the timber is now being constructed for operation in connection with Cook's lumber mill. The track runs under the right-of-way of the Fraser Valley Line.

The Crescent Valley Lumber Company, Limited, has been incorporated with head office at Vancouver, B. C., and capital stock of $25,000, to carry on business as timber merchants, sawmill owners, timber growers and to deal in timber and wood of all kinds.

The Pacific Mills, Limited, have been registered with head office at Victoria, B. C. The objects of the company are to manufacture pulp, paper and lumber and to carry on business as timber merchants, sawmill owners, loggers, etc.

The Standard Lumber Company, Limited, Cranbrook, B. C., expect to have their sawmill at Wasa, on the Kootenay Central Railway, in operation in the near future. The plant was removed from Yahk, about forty miles west of Cranbrook, where the firm's limits are cut out.

The Keystone Logging & Mercantile Company, Limited, has been incorporated with head office at Silverdale, B. C., and capital stock of $10,000, to acquire and take over the business formerly carried on by H. C. Watkins, Silverdale, B. C., as lumber merchants, manufacturers of and dealers in lumber, timber, laths, shingles, sash and doors, etc.

In Elko Valley, B. C., the plants of the Baker and Ross-Saskatoon Companies are cutting steadily, but the Adolph Lumber Company, at Baynes Lake, will have an idle season for the first time in its history, no logs having been taken out last winter. The fact of the mill being down will not interfere with shipments, a big stock of air-dried lumber having been carried over from last season.

The Ontario Government sold by tender on July 15th the right to cut several lots of timber on the 1st, 2nd, 3rd and 4th concessions of the Township of Auld, district of Temiskaming, to the highest tenderer, P. G. McNeil, of Latchford, Ont. The tender was as follows:—red and white pine $5.55 per thousand feet bonus and $2 dues; Jack pine and spruce $2.05 per thousand feet bonus and $2 dues; pulpwood 65 cents a cord bonus and 40 cents a cord dues; ties 8 cents each bonus and 5 cents dues. These prices are in addition to the ground rent of $5 per square mile. The license granted is renewable annually until April 30th, 1918, after which the remaining timber reverts to the Crown. The successful tenderer was required to make a deposit of $3,000 and to furnish a bond of $9,000 to guarantee completion of his undertaking.

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914 cut.

Merchantable 1 x 4 x 10/13
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all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60 per cent. 12 13 ft.

Cull White Pine—1914 cut

1 in. and 3 in. x 4 in. up x 6/16

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13
3 in x 9 in x 10/13

3,000,000 pieces Mill Run Pine Lath, 4 x 1½ x ⅜, 1915 cut.

1,000,000 pieces Mill Run Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

1,000,000 pieces No. 2 Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

Write to-day!

Blair & Rolland, Ltd.

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Railway Ties, Fence Posts, Etc.

Prompt shipment. Satisfactory stock. Good service. Write for Prices.

A. F. B. AUSTIN, Manager

To the Owner of Timber Lands

Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

L. E. Campbell Lumber Company

Cruising and Engineering Department
2234 Dime Bank Bldg. - - DETROIT, MICH.

The Individual Regulation of Hardwood Production

(Continued from page 48)

of the American hardwoods discovers peculiar incentives for conservative production.

American Hardwoods Limited

The hardwood forest of the United States begins in Texas and extends north-east to Wisconsin, Michigan and Maine, through the oldest and most completely settled portions of the United States. The stand of hardwood in this forest has been estimated from 400 to 500 billion feet, and the annual cut in lumber 8 to 10 billion feet, and possibly half as much more per annum is consumed in other products than lumber. Moreover, this stand of hardwood is virtually all mature timber.

The study I have made of our own Wisconsin hardwood forests, cut into as they have been by logging operations, leads me to believe that the growth of the young timber is more than offset by decay, fire and wind damage—so that the limitation of the supply of hardwood must have a material effect upon the price of hardwood lumber during the years to come.

Furthermore, it must be borne in mind that the estimated stand of hardwood is not all available for lumber production. A very appreciable percent is now retained by private owners for beautifying their estates; by farmers for wood lot purposes; by states for public parks. I know of no figures available on this subject.

There are about fifty varieties of American hardwood—the most commercially important, measured in the order of the amount produced, are: oak, maple, red gum, yellow poplar, chestnut, birch, beech, basswood, elm, cottonwood and ash—and these leading commercial woods themselves vary materially both in quality and in price and in the nature of their usefulness. For example—rock and soft elm; red oak and white oak; hard maple and soft maple. The variety of these woods breaks up the problem of available supply into a great number of smaller groups. The cut of oak and maple is about one-half the total—leaving less than 200 billion feet of other mixed hardwoods. Surely the production of the various American hardwoods, each with its distinctive quality of utility and beauty, is a matter of intensive development with the profit determined by quality rather than quantity—not simply an industry, but a fine art.

And finally, a most important element in the future value of all these hardwoods is that their only competitors are imported woods of little, if any, greater intrinsic value, but with better established reputation and higher market price.

Hardwood Price Line

By a series of combinations and averages I have plotted a composite line for hardwood f.o.b. mill, which shows the trend of prices from year to year. This price line shows a gradual advance commensurate with the increased cost of stumpage from year to year.

This increase amounts to approximately 50 cents a year per M., so that nothing is lost or gained by decreasing or increasing the annual rate at which the operator consumes this stumpage. The fluctuations in mill prices are due to market conditions which mean, not simply the demand, and the fluctuations in the demand, but the supply and the demand and their relations to each other.

Moreover, the demand is inelastic; one dollar or two dollars, or more—even five dollars reduction in the price does not increase the amount of lumber consumed—in fact some dealers tell me the opposite is true, whereas the supply of lumber is extremely elastic—one dollar or two dollars more in price increasing the supply enormously.

Hardwood Production.—While we were enjoying the high average prices of 1913 we did not realize that their direct effect would be to over-stimulate production, and that in 1914 some 500 mills, about 250 of which were hardwood mills, belonging to regional associations, out of some 15,000 hardwood mills, throughout the United States, would report a surplus production of 175 million feet—or nearly one-third of their total production. A peculiarity of this over-production during last year was that it all occurred in the first six months of the year, and that the curtailment of almost 50 per cent. in the manufacture of hardwood took place during the last six months of the year.

This was largely due to the fact that the season's cut is mostly in the first six months in the year. I believe, too, that a large part of this curtailment was the individual regulation, by the individual manufacturer, of his production to meet market conditions.

The Problem of Regulation.—A voluntary agreement amongst all hardwood producers looking toward a limitation of production, whether a question of legality or not, is almost a physical impossobility. Less than one-fourteenth of the total hardwood lumber produced is produced by mills reported to the Manufacturers' Associations. Less than three per cent. of the number of mills, important enough to be considered in the United States Census Report, are association mills. All that can be done toward a reasonable regulation of production is to carry on a campaign of education—first of all among ourselves, and in this I include not only manufacturers, but the wholesale dealers, who come in more or less contact with many of the smaller producers outside of the association.

This problem, if it is to be solved, must be solved individually, and fortunately for our industry—what is for the interests of the individual, independent of the course pursued by his competitors, is for the interest of the industry as a whole.

The Solution

The extent to which each manufacturer will regulate his production depends upon his mental grasp of the conditions affecting his business. The first requisite is a careful study of the actual costs of production. This is a difficult study—especially in mills sawing mixed hard and soft woods, for the logging and manufacture of hardwood costs proportionately more, and the manufacture of soft wood proportionately less than the average—I would say, roughly, that it costs from 25 to 40 per cent. more to manufacture hardwood than softwood.

A still more difficult study is to determine on the indirect or overhead charges to be placed against the production of lumber—including the proper amount of interest and the proper or reasonable margin of profit. Every manufacturer makes some attempt at doing this and fixes in his mind some figure below which he will not sell his lumber. This being the case, is it not reasonable for him to fix this minimum price below which he will not sell as the point beyond which he will not produce? I have printed a "Query" embodying this simple proposition, which I would like to have each manufacturer take home and talk over with his organization, and I would like to have every wholesaler pass it on to the mills manufacturing his lumber.

If we grant that every individual producer of hardwood should, through the publicity given to this subject, determine to carefully regulate his production in accordance with his sales—after regulating his sales in accordance with his cost of production—we would still have, in every sense of the word, a freely competitive market, because each individual producer would be in competition with every other producer in determining his selling price, but it would be a market in which the producer and consumer were evenly balanced; a comparatively stable market in which there was little fluctuation in price thereby protecting the wholesaler and the manufacturing consumer in contracting for future requirements—and finally, a market in which every development and extension of the uses of hardwood would tend to develop better values.

"This Association was born in Chicago in 1897, and its first meeting was attended by less than thirty lumbermen." I am quoting from your former President—Mr. Barnaby—"That there was great need of such an organization, no honest man questioned. Prior to that time every market had its own rules of inspection, and both buyers and sellers interpreted such rules as they saw fit. In those days the question of securing fair treatment on the inspection and measurement was of equal importance with the financial standing of the customer."

The same energy; the same spirit of co-operation, and the same intelligence that has accomplished order out of chaos in inspection rules in this association, will, in our state associations, quickly bring about a reasonable regulation of production, which, together with a reasonable development and extension of hardwood consumption, will cause a return of prosperity to our hardwood industry in all its branches; the proper conservation of hardwood timber and a sound economic foundation for future development.

Canadian Cereal and Flour Mills, Limited

The attention of our readers is called to the advertisement of Canadian Cereal and Flour Mills, Limited, which appears on page 58. of this issue. We understand that this company is now being reorganized and while they have in the past done a large business in flour, cereals and other products, they are now putting forward even stronger efforts to secure new business.

The head office of the company is in Toronto, while its mills are situated in various parts of Ontario. The company has branches and agencies in Ottawa, Montreal, Quebec, Halifax, St. John, N.B., and St. John's, Newfoundland, in addition to its regular staff of salesmen and is, therefore, in a position to take orders and ship goods promptly to any part of Ontario, Quebec, or the Maritime Provinces.

The company's products include such well-known brands as Rainbow, Star, Lily, and Gold Seal Flours, Tillson's Rolled Oats, Premium Oats, etc., which have succeeded in earning an excellent reputation for quality. They are particularly suited for use in lumber camps where the work is hard and good food essential. They are already favorably known in many of the camps in the Eastern Provinces. Special attention is given to this line of business, particular care being taken with the goods which are shipped into the camps.

The company has built up for itself a reputation for quality and service which has stood all tests and its rapidly increasing business shows that the public has stamped them with its approval.

SUPPLIES!

We can quote you lowest market price on

Currants
Raisins
Figs
Evaporated Apples
Peaches
Apricots
Prunes
Canned Fruits and Vegetables
White Beans
Etc., Etc.

We want your enquiries.

H. P. ECKARDT & CO.

WHOLESALE GROCERS

Church St. & Esplanade, TORONTO

The Enterprise Camper Steel Range

Camp cooking demands a range that will stand hard usage and give steady reliable service. The Enterprise Camper Steel Range is ideal for camp cooking. It combines large capacity, generous dimensions, durability and perfect operation with compact construction.

Burns wood or coal. The fire box takes a stick of wood 32 inches long. The oven is extra large and fitted with a strong well braced door. Will cook for 60 to 100 men.

MADE IN TWO SIZES

No. 9-24 with six, 9″ covers and a 24″ oven.

No. 10-30 with six, 10″ covers and a 30″ oven.

It's Built for Camp Service

Write us for illustrated circular and prices.

The Enterprise Foundry Co., Sackville, N.B.

"Hipcoscope" Lumberman's Electric Lantern

Always Ready. Can't Start a Fire. Cheaper to Use than Oil.

This new searchlight (see illustration) will throw a strong light 300 feet. Operated on two No. 6 dry cells which may be secured anywhere in Canada for twenty-five cents each.

The "Hipcoscope" is the ideal light for your night watchman—he can search every alley. The "Hipcoscope" gives 200 hours light for fifty cents.

It is impossible for the "Hipcoscope" to start a fire no matter what you do to it. Used with the "Hardinge" Portable Watchman's Clock your plant and yard are practically safe from fire or theft. Owing to weight it does not pay to ship batteries. Delivered free without batteries, for $4.50 anywhere in Canada.

Lintz-Porter Co., 27 Yonge St. Arcade, Toronto

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(The New Anti-Friction Lubricant)

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PREVENT HOT BOXES

SAVE 40 TO 50% ON OIL BILLS

Send for a 5 Pound Can on a 30 Days' Trial

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Strong Points of the "Superior" Lath Machine

The "Superior" Lath Machine is well constructed of high-grade materials. It stays on the job saving time and money. It gives satisfactory results. 15 to 20 horse-power will run it. Capable of taking four saws. Specifications are: Wooden frame. Belt or Chain Feed. Ring-oiling Boxes. Driving Pulley 10 in. diameter, 9-in. face. Capacity with two saws 40,000 to 50,000 a day.

Some Satisfied Users

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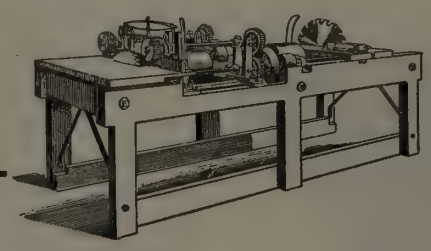
We also make Sappers, Cedar Cut Offs, Shingle Machines, Car Wheels, and Castings of all kinds.

Let us estimate on your requirements.



The Smith Foundry Co., Ltd.
Fredericton, N. B.

Are your horses of use to you?

This seems an absurd question—and the answer is always **"Of course they are"**—In which case provide your stables with:

Johnson's Reliable Veterinary Remedies

Johnson's Horse Liniment, No. 1 (Alcoholic)

1 gal. jugs (Imperial)	$4.50 gal.
1 lb. bottles	8.00 doz.
2 lb. bottles	15.00 doz.

Johnson's Horse Liniment, No. 2 (an oil liniment)

1 gal. jugs (Imperial)	3.00 gal.
1 lb. bottles	6.00 doz.
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Johnson's Horse Colic Remedy
A sure and speedy cure for all kinds of Colic

1 gal. jugs (Imperial) 40 doses	5.00 gal.
1 lb. bottles 4 doses	8.00 doz.
2 lb. bottles 8 doses	15.00 doz,

Johnson's Veterinary Healing Ointment (Gall Cure)

2 lb. tins	2.00 per tin
4 oz. tins	3.50 doz.

Johnson's Condition Powders (Concentrated)

1 lb. Packages	3.60 per doz.

Johnson's Camp and Household Remedies, such as Cough Syrup, Healing Ointment, Headache Powders, Big 4 Liniment, Stomach Bitters, Cathartic Pills, etc., etc., have stood the test of twenty-five years and are in use all over Canada, from the Atlantic to the Pacific. Prices are lower than those of all other manufacturers. Letter orders receive prompt attention.

A. H. Johnson, Wholesale Druggist, **Collingwood, Ont.**

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— effect —

Automatic Sprinklers

Safety — Economy

Write us for information

Head Office: 297 Campbell Ave., Toronto

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82" Main Drive Belt
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Fisk Rubber Co., Chicopee Falls, Mass.

One Inch or Eighty-two Inch

Machine Belt or Main Drive Belt. For any service and every service, G & K Belts give absolute satisfaction.

Because like the Fisk 82", all G & K belts from the smallest to the largest are quality products throughout. They are carefully constructed from leather of our own tannage, tanned slowly, uniformly, and expressly for belting purposes. They possess the essential qualities of pliability, firmness with minimum stretch, great tensile strength and durability. Lastly they are absolutely guaranteed as to quality and workmanship.

There is a G & K belt for every drive—its use means maximum production and low cost of operation.

Our Engineering department is thoroughly equipped to give expert assistance and advice upon any transmission problem, and to investigate and design any drive upon request. Why not let us serve you.

The Graton & Knight Mfg. Co.

Oak Leather Tanners and Belt Makers

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Dodge Mfg. Company, Limited
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Waterous Engine Works Company

PULP MILL MACHINERY
Hamilton Company, William
Moreau Barking Machine Company

Continued on page 58)

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa,
December 20th, 1912.

Deputy Minister.

PUMPS
Hamilton Company, William
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

REDWOOD LUMBER
Mershon Lumber Co., John D.
Pacific Lumber Company

ROOFING
Bird & Son
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company
Rat Portage Lumber Company
Rimouski Industrial Company
Tessier, Alphonse

SAWS
Atkins & Company, E. C.
Cocker Manufacturing Company
Disston & Sons, Henry
Hoe & Company, R.
Radcliff Saw Mfg. Company
Shurly-Dietrich Company
Simonds Canada Saw Company
Wilson & Son, Walter

SAW MILL MACHINERY
Berlin Machine Works
Hamilton Company, William
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company
Williams Machinery Co., Ltd., A. R.

SHINGLES
Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Rat Portage Lumber Company
Snowball Company, J. B.
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Hamilton Company, William
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SOUTHERN PINE
Arkansas Soft Pine Association
Cameron & Company
Garrett Lumber Company, T. H.
Hobart & Company
Mason, Gordon & Company
Wilson Lumber Company
Wuichet, Louis

SPRINKLER SYSTEMS
Keiths Limited

SPRUCE
Auger & Son
Bartram Bros.
Blair & Rolland
Brown Corporation
Cameron & Company
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
Miller Co., Ltd., W. H.
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL CHAIN
Canadian Link-Belt Company
Hamilton Company, William
McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

SNOW PLOWS
Pink Company, Thos.

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

TIMBER BROKERS
Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS
Lauderburn, D. E.
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TRANSMISSION MACHINERY
Canadian Link-Belt Company

TUGS
West & Peachey

VENEERS
Hoffman Brothers Company
Webster & Bro., James

VENEER MACHINERY
Coe Manufacturing Company
Perrin, William R.
Philadelphia Textile Machinery Co.

VETERINARY REMEDIES
Fleming Bros.

WOODWORKING MACHINERY
American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Hamilton Company, William
Long Manufacturing Company, E.
Mereen-Johnson Machinery Co.
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

WIRE ROPE
Thorne & Company, Limited, W. H.

Good Food Produces Energy

MR. LUMBERMAN AND CONTRACTOR :—

We wish to thank you for your valued business in past seasons. We are in a better position than ever to supply your wants and will appreciate your inquiries when you are in the market for any of the following :

Rainbow Flour—High Patent Manitoba.
Goldie's Star—Famous Blended Flour.
Lily Flour—For Pies and Pastry.
Rolled Oats, Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

ABSOLUTE PURITY GUARANTEED.

Your men will appreciate the high quality of our cereals. **Most important is the fact that men who are well fed can give much better service.**

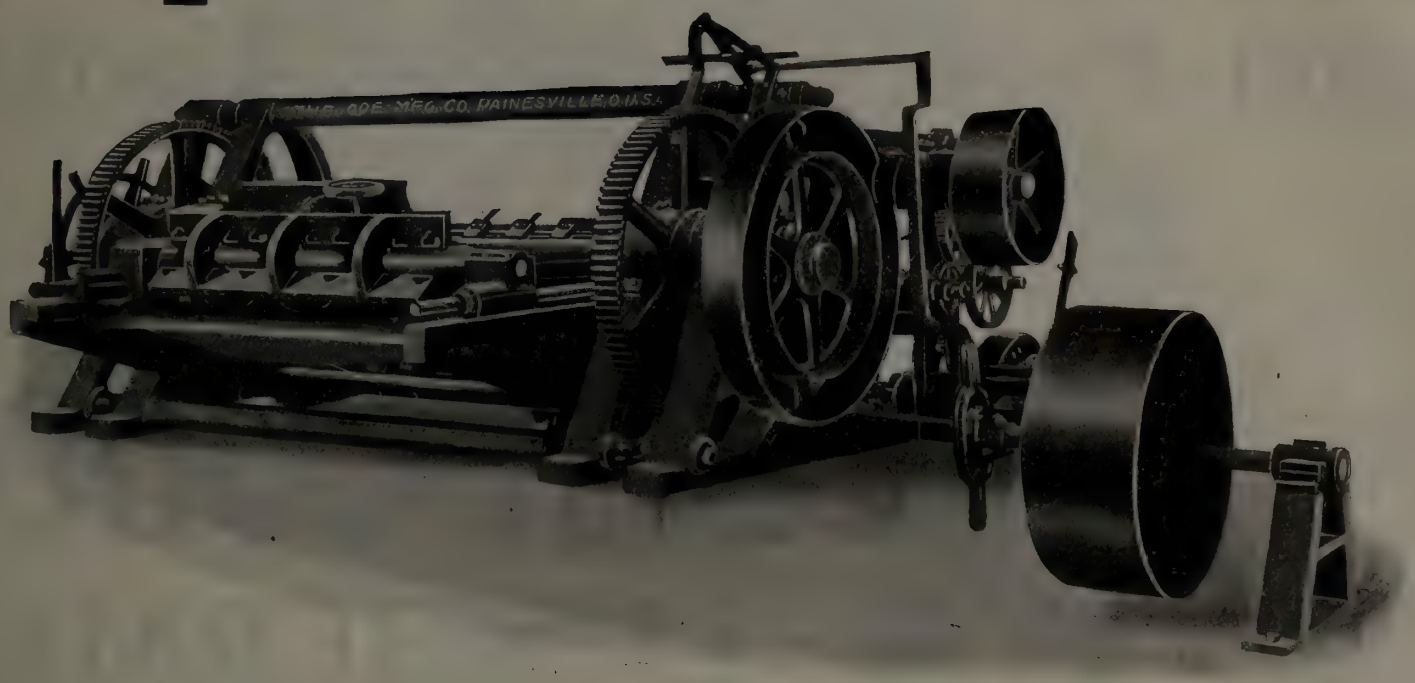
PATRONIZE CANADIAN INDUSTRIES

Canadian Cereal and Flour Mills, Limited

Royal Bank Building, TORONTO, ONT.

Veneer Machinery

Rotary Cutter with Impression Roller



Where there is use for a large quantity of the same dimension stock, a Coe Rotary Veneer Cutter style "I" fitted with spur knives and back impression roll, carrying two, three or four knives, will deliver material direct from the log—cut to size—right in length, breadth and thickness.

In an ordinary day of ten hours this machine will cut anywhere from 75,000 to 100,000 surface feet of case, crate, package or box stock—capacity enough to work up profits out of any timber fit for Veneer Stock. We add to range by supplying scarfing knives for can jackets, hoops, etc.

We handle the machinery end of the Veneer making proposition from beginning to end, furnish you plans and complete equipment and can do it in short notice.

Write us for catalogue

The Coe Manufacturing Co.

PAINESVILLE, OHIO, U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer equipment in the world.

Lumbermen's Tents and Clothing

Pure wool, Waterproof Mackinaw Coats, Pants and Shirts,
the kind you have been looking for.

Repellant Brand Army Duck Tents

The best duck that money can buy.
We can equip your van complete.

Pure wool Blankets, Sweaters, Underwear. Hand Knit Mitts and Socks. Palmers Shoe Packs, Buck and horse hide Moccasins, etc.

Grant-Holden-Graham, Limited

Factory and Warehouse

147 to 151 Albert Street, Ottawa, Can.

RUBBER GOODS FOR LUMBERMEN

Belting Our long experience in the making of Rubber Belts enables us to specialize on this line. "Monarch" "Red Strip" and "Lion" are our leading brands for power transmission. (Write for Booklet B-1.)

Packings "Redstone" High Pressure Sheet Packing has proved by test that it will outlast any other similar packing on the market. We make Spiral and Ring Packings, etc., that are equally reliable. (Booklet P-1.)

Hose for Steam, Water, etc., in various grades, made especially to give satisfactory and economical service under different conditions. (Booklet H-1)

Fire Hose One or more of our twenty brands of Fire Hose will be found, not only in the best equipped Factories, Mills, etc., but in almost every Fire Department in the Dominion. (Booklet H-1)

Gutta Percha & Rubber, Limited

Successors to
The Gutta Percha & Rubber Mfg. Co. of Toronto, Limited

TORONTO MONTREAL WINNIPEG CALGARY VANCOUVER

One Setter Can Work All Day With This Machine

Our Four Inch Steam Set

with enclosed dirt proof ratchet set works

The great saver of time, money and energy in the saw mill.
Will cut more lumber because it is steam operated.
Will manufacture better lumber because the piston travel is exact.
Will set up to four inches with one throw of the lever.
Easier to handle than any hand set works.
Easy to instal and connect up to any carriage.
Always carried in stock for immediate shipment.

We build everything needed in a Saw Mill.
Get our catalognes.

William Hamilton Co., Limited

Peterborough, Ontario

Western Agents: J. L. Neilson & Co., Winnipeg

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:		
1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00
Hemlock No. 1:		
1 x 4 and 5-in. x 9 to 16 ft.		17 00
1 x 6-in. x 9 to 16 ft.		20 00
1 x 8-in. x 9 to 16 ft.		21 00
1 x 10 and 12 in. x 9 to 16 ft.		22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.		19 00
1-in. No. 2, 6-ft. to 16-ft.		16 00
2 x 4 to 12, 10 and 16 ft.		19 00
2 x 4 to 12-in., 12 and 14 ft.		19 00
2 x 4 to 12-in., 18 ft.		22 00
2 x 4 to 12-in., 20 ft.		24 00
2 x 4 to 12-in., 22 ft.		25 00
2 x 4 to 12-in., 24 ft.		26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.		16 00
Clear in B. C. cedar, kiln dried		50 00
Douglas Fir:		
Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.		31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.		32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.		32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.		33 00
10x20, up to 32 ft.		33 50
6x18, 8x18, up to 32 ft.		34 00
6x20, 8x20, up to 32 ft.		35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet.	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/4	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in.	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards:		
1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 30 to 35 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00 45 00
1¼, 1½ and 2-in.	36 00 45 00
2½ and 3-in.	45 00
4 inch	50 00

No. 2 Barn

1 inch	28 00 36 00
1¼, 1½ and 2-in.	30 00 36 00
2½ and 3-in.	38 00

No. 3 Barn

1 inch	21 00 28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00 25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00 25 00
No. 2, 1¼, 1½, 2-in.	19 00 23 00

Mill Culls

Mill run culls, 1-in.	19 00
1, 1¼, 1½ and 2-in.	20 00
No. 2	17 00 18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E. 6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed)	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $5 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	63 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 64)

28 "Service" Branches Throughout Canada

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No. 1 Moulding 8/4		58 00
No. 2 Moulding 5/4		47 00
No. 2 Moulding 6/4		47 00
No. 2 Moulding 8/4		47 00
No. 1 Barn 1 x 12		48 00
No. 1 Barn 1 x 6 and 8		34 00
No. 1 Barn 1 x 10		36 00
No. 2 Barn 1 x 6 and 8		32 00
No. 2 Barn 1 x 10		34 00
No. 3 Barn 1 x 6 and 8		26 00
No. 3 Barn 1 x 10		27 00
Box 1 x 6 and up		23 00
Box 1 x 10		25 00
Box 1 x 12		26 00
Box 1 x 13 and up		30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	40 - 42	26 - 28	14 - 16
5/4 to 8/4	42 - 44	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00

Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	48 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	20 00	21 00

All other random lengths, 7-in. and under, 10 ft. and up		20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1½-in. spruce laths		4 10
1½-in. spruce laths	3 65	3 75

New Brunswick Cedar Shingles

Extras	3 25	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites		2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 20	3 30
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear		3 28

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To suffer the slings and arrows
Of outrageous fortune,
Or to take arms against a sea of troubles." —Hamlet.

Hamlet the Prince of Denmark is a character which

every budding actor aspires to play. The late Sir Henry Irving certainly inspired many to study the works of Shakespeare and those who were privileged to hear him in Hamlet's famous soliloquy are not likely to forget it. Most of us have been in a state of doubt on many occasions and said to ourselves: The question is:

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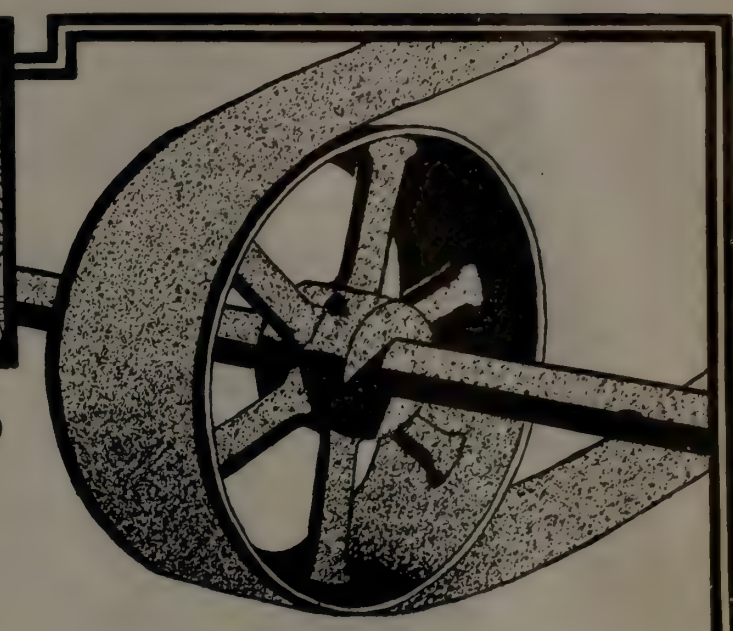

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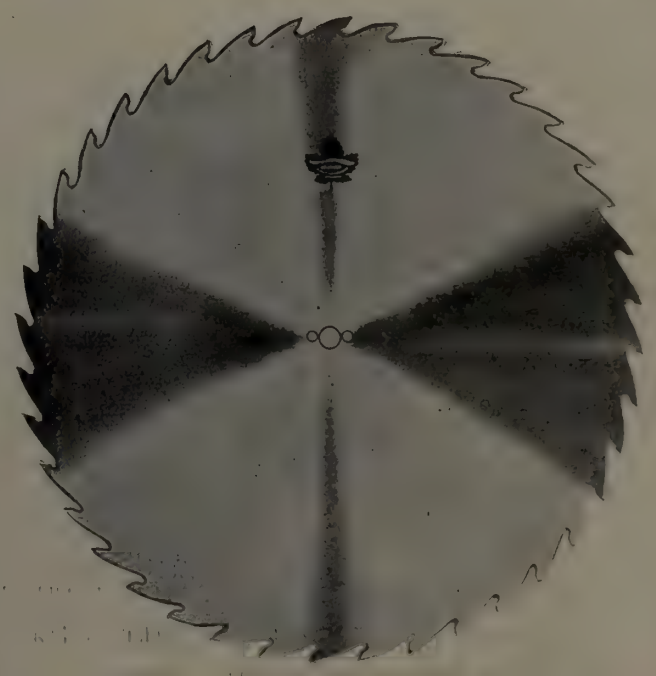

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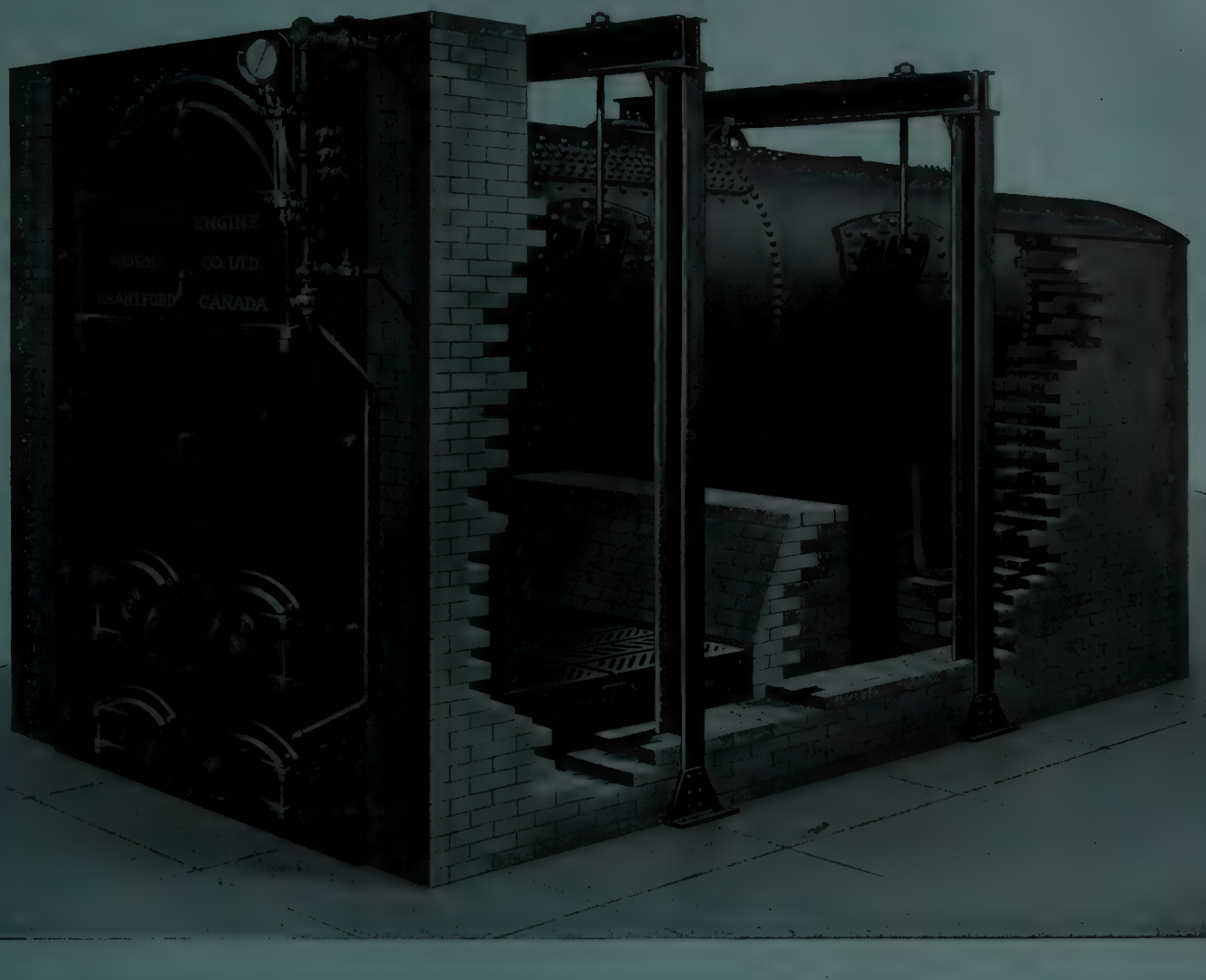

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Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

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For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, **40c per lb.**; West of Fort William, **45c**, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

For 50 Years

"Camel" Belting Has Been Sold

Stock 2" wide to 24" wide for immediate delivery.

THE "CAMEL HAIR" BELT shown above is 12 inches wide, developing 100 H.P. It has been in continuous use since the year 1890.

During the first 10 years it ran exposed to the weather (extreme cold and extreme heat, rain, sun and ice.)

In 1900 it was covered in and at this date (1915) after 25 years of hard service it is still running and carrying an increased H.P. with 100 per cent. efficiency.

Telegraph at our expense.

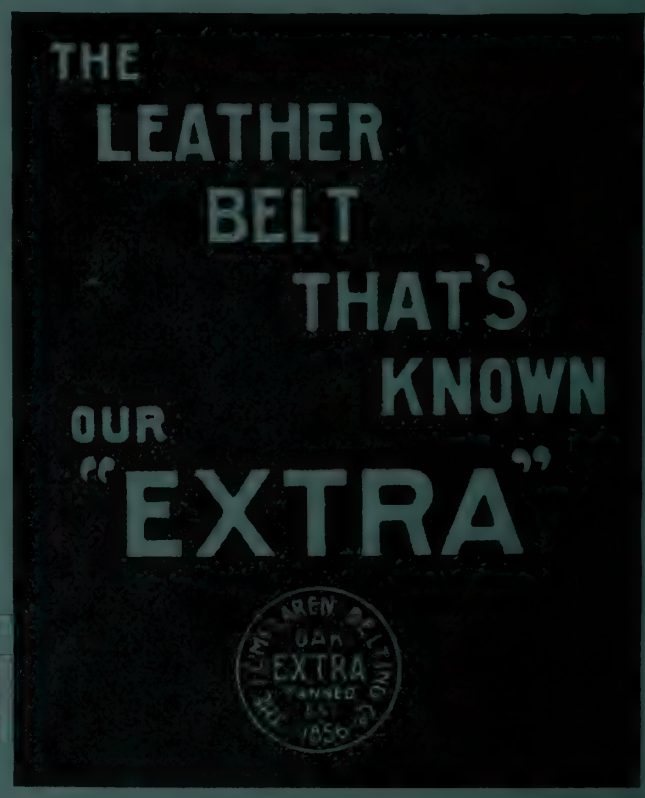
BEWARE OF IMITATIONS.

The Trade Mark on belt is our guarantee and your protection.

Sole Makers **F. Reddaway & Company**

653 St. Paul St. West, MONTREAL, QUE.

Stocks carried by our Selling Agents:— A. R. Williams Machinery Co. Ltd., Toronto, Ont. A. R. Williams Machinery Co. of Winnipeg, Ltd.



Montreal Toronto Winnipeg

The J. C. McLaren Belting Co.
Limited

General Mill Supplies MONTREAL

6 H.P. Heavy Duty Engine and Reverse gear with Winch

River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.

Vol. 35 Toronto, August 15, 1915 No. 16

Canada Lumberman & Wood Worker

New **RAILS** Relaying
12 to 80 pounds per yard.
LOGGING CARS
Jno. J. Gartshore
58 Front St. West, Toronto

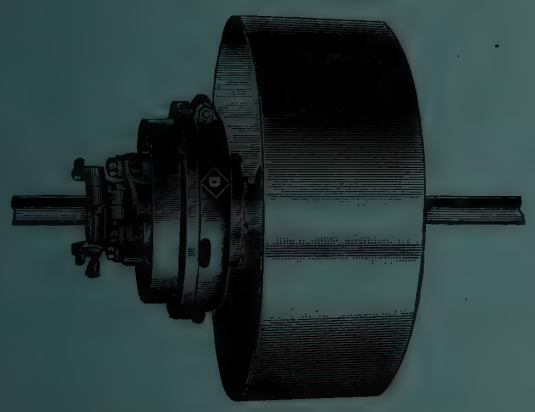
Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.



DODGE FRICTION CLUTCH PULLEYS

For Saw Mills and Planing Mills

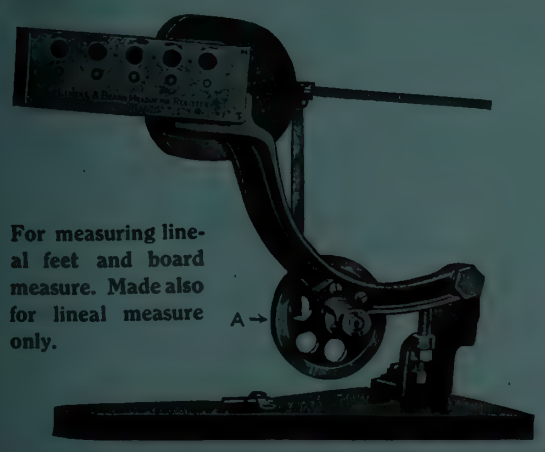
A simple, positive, durable clutch! Every Friction Clutch Pulley we sell is guaranteed suitable and satisfactory for the work or money refunded. All sizes split or solid for quick shipment.

Dodge Manufacturing Company, Limited
TORONTO -:- MONTREAL

GENUINE "TURBROS"
Balata Belting
Waterproof and Stretchless.
The best belt for sawmills.
Manufactured and guaranteed by
Turner Bros. Canada Limited
Montreal — Vancouver

Every part of every one of our **PUMPS** is **MADE IN CANADA**

Unexcelled in Workmanship and Material.
The Smart-Turner Machine Co., Ltd.
HAMILTON - CANADA



For measuring lineal feet and board measure. Made also for lineal measure only.

Morrison Lumber Measuring Register

This register can be attached to your planer, moulder, resaw, matcher, your sorting table, or any other place you require. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

VULCABESTON RED FIBRE PACKING

You want a packing that will give you the longest and most satisfactory service under the hardest mill conditions. Vulcabeston Red Fibre sheet packing withstands hot or cold water and extreme vibration. It is selected fibred asbestos, impervious to moisture and very dense.

WRITE US FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO
SEE OUR EXHIBIT AT THE TORONTO EXHIBITION.

Alphabetical Index of Advertisers, Page 54 Classified Directory to Advertisements, Page 62

"Leather like gold has no substitute."

Made in Canada

Amphibious as The Frog

"AMPHIBIA"

The Intelligently Built Waterproof Leather Belt

A belt to run efficiently must be built intelligently from the obtaining of hides at their proper season through every stage of manufacture to the finished belt.

From nearly 40 years experience in the tanning and manufacturing of the best leather belts we have a thorough appreciation of what leather belt in a saw or planing mill must stand. With this knowledge we have built "AMPHIBIA" waterproof leather belt—built it intelligently from the best hides.

The leather in "AMPHIBIA" belting is given a special tanning which renders it absolutely waterproof and also extremely flexible. It has a surface that grips the pulleys and transmits a maximum amount of power.

Send us a trial order stating where the belt is to run and we will ship you something that will exceed your ideals of a perfect leather belt. Write us.

Sadler & Haworth

Tanners and Manufacturers

For 39 Years Makers of the Best Leather Belts

MONTREAL	TORONTO	ST. JOHN, N.B.	WINNIPEG	VANCOUVER
511 William St.	38 Wellington St. E.	149 Prince William St.	Galt Building	107-111 Water St.

To insure satisfaction—State where belt is to run

PLANT OF
GEORGE GORDON AND COMPANY, LIMITED
CACHE BAY, ONT.

Bird's eye view of Mills and Lumber Yards

The mill which appears above was burned on July 19th. Our other mill is still running day and night. Our planing mill and yards are intact.

White and Norway Pine

CONTINUE TO SEND US YOUR INQUIRIES FOR DIMENSION TIMBER, DEALS, ROUGH AND DRESSED LUMBER IN ALL SIZES AND GRADES.

George Gordon & Co.

Limited

CACHE BAY, ONTARIO

Mason, Gordon & Co. 80 St. Francois Xavier Street, Montreal, Que.

Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - Western Office:—Pacific Building, VANCOUVER, B. C.

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock— heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont.

JOHN DONOGH & CO.

Wholesale Dealers
Are looking for buyers
—Special—
1 x 4 & 5 White Pine common and dressing 1913 cut
Dry Hemlock and Spruce all sizes
1205 TRADERS BANK BUILDING, TORONTO

P. & J. SHANNON

Manufacturers of

White and Norway Pine Lumber Lath, Etc.

Inquiries solicited for 1915 cut. Mill and equipment new in 1914.

Head Office and Mill:—**Biscotasing, Ont.**

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For Immediate Shipment

38,000 feet 2 x 4 — 10 — 16
48,000 feet 2 x 6 — 12 — 16
60,000 feet 2 x 8 — 12 — 16
40,000 feet 2 x 10 — 12 — 16
15,000 feet 2 x 12 — 12 — 16
40,000 feet 1 x 6 and 7
30,000 feet 1 x 8
30,000 feet 1 x 9 and wider

PILING

We always have on hand a full line of Spruce and Tamarac Piles, 25 to 50 feet in length.

ARTHUR N. DUDLEY

Lumber, Lath and Shingles
109 Stair Building, Toronto Phone M. 6368

GILLIES BROS., Limited

BRAESIDE, ONTARIO

WHITE PINE RED PINE SPRUCE

WE OFFER FOR PROMPT SHIPMENT.

Spruce—Log Run

(Mill Culls Out)

8/4 x 4 and up x 10/16	5,000	8/4 x 7 x 17/22	500
8/4 x 6 x 10/16	10,000	8/4 x 8 x 17/22	18,000
8/4 x 7 x 10/16	5,000	8/4 x 9 x 17/22	1,500
8/4 x 8 x 10/16	70,000	8/4 x 10 x 17/22	25,000
2 x 10 x 10/16	14,000	8/4 x 12 x 17/22	4,500
8/4 x 12 x 10/16	55,000	(The 8/4 is sawn the Eastern scant thickness).	
8/4 x 6 x 17/22	5,000		

Spruce—Culls

1 x 4 and up x 6/16	250,000
5/4 x 4 and up x 6/16	450,000
8/4 x 4 and up x 6/22	50,000

Tamarac—Log Run

4/4 x 4 and up x 6/16	70,000
5/4 x 4 and up x 6/16	4,000
3 x 4 and up x 6/16	3,000

Very desirable stock for shell box making as it is nice knotted, well manufactured and dry.

Spruce

46,000 ft. 1 x 4 and 5 No. 1.
6,500 ft. 1 x 6 No. 1.
4,000 ft. 1 x 8 No. 1.
87,000 ft. 2 x 4 No. 1.
35,000 ft. 2 x 6 No. 1.
28,000 ft. 2 x 8 and up No. 1.
91,000 ft. 1 in. No. 2.
29,000 ft. 2 in. No. 2.

Birch

For Ammunition Boxes

1 x 6 No. 1 and 2 Common.
1 x 8¼ and up No. 1 and 2 Common.

Basswood

1 car 1 in. No. 1 Common and Better.
2 cars 1 in. No. 2 and 3 Common.

Black Ash

1 car 1 in. No. 1 Common and Better.
1 car 1 in. No. 2 and 3 Common.

The Long Lumber Company

HAMILTON, ONT.

Are You Being Held Up?

Hostile times cause panic, prices go aviating and the public pay what is asked.

Buy Hocken's Hemlock

and you will get a square deal—good stock and a prompt shipment—write us.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

Watson & Todd Limited

WHOLESALERS

Dry White Pine and Norway

OTTAWA

Also

Montreal and Liverpool, Eng.

The

Harris Tie & Timber Co.

Ottawa - Canada

Lumber - Lath - Shingles

Cedar Poles and Posts

Railway Ties - - Piles

The

Georgian Bay Lumber Co.

Limited

Waubaushene, Ontario

Manufacturers of High Grade

Lumber and Laths

Fraser Bryson Lumber Co., Ltd.

Office, Castle Building 53 Queen St. Ottawa, Can.

Wholesale Lumber Dealers and Selling Agents for

Fraser & Co.

Mills at

DESCHENES - - - QUEBEC

White Pine
Red Pine
Spruce
Lumber and Lath

River Ouelle Pulp & Lumber Co.

Manufacturers of

SPRUCE

Lumber Lath Pulpwood

Head Office and Mills at:

St. Pacome, Que., Canada

On I. C. Ry. 75 Miles East of Quebec City

Also Mills at:

Crown Lake, Powerville, Riv. Manie

On Nat. Transcontinental Ry.

BARTRAM BROTHERS, LIMITED

OTTAWA, CANADA

Spruce - Red Pine - White Pine

Large stock dry 1" and 2"

Have large stock 3" Spruce Deals for export trade at water points and can make delivery.

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

K L I M

Spell it backward

THE LUMBERMAN'S MILK

Klim is a standard soldier's ration used to-day in every camp from Victoria to Halifax.

Made in Western Ontario. Klim is pure separted milk in powder form. Will not spoil in hot weather. Severest cold cannot affect it. Cheaper than fresh liquid milk. One-third cost of Condensed Milk. No freight to pay on useless water. Using Klim means no waste. It means pure milk for the lumber camp. We can prove our statements.

Packed for camp use especially in 10 lb. tins, $2.00 each. One pound makes one gallon of liquid. Large quantities special prices.

Write for sample and full information.

Canadian Milk Products Ltd., Toronto

Plants:—Belmont, Ont., Brownsville, Ont. **Head Office:—Mail Building**

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

FIR TIMBERS

HIGH GRADE RED CEDAR SHINGLES

LET US QUOTE YOU PRICES

TIMMS, PHILLIPS & CO., LTD.

Yorkshire Building, VANCOUVER, B. C.

The Glue Book

What it Contains:

Chapter 1—Historical Notes.
Chapter 2—Manufacture of Glue.
Chapter 3—Testing and Grading.
Chapter 4—Methods in the Glue Room.
Chapter 5—Glue Room Equipment.
Chapter 6—Selection of Glue.

Price 50 cents

Canada Lumberman & Woodworker

347 Adelaide St. West, Toronto

Heavy Fir Dimension

Is Our Particular Specialty

The Heavier it is the Better we like it

We Dress from 1 to 4 Sides up to 16-in. x 20-in., 60-ft.

Our grade is posstively right, and prices will please

Timberland Lumber Co., Limited

Head Office, Westminster Trust Bldg., NEW WESTMINSTER, B.C.

Mills at Craigs on the B.C.E.R.

Shipment by C.P.R.R., G.N.R.R. or B.C.E.R.R.

Thurston-Flavelle Lumber Company

MANUFACTURERS OF

British Columbia Red Cedar Exclusively

4, 5 and 6 inch "CLEAR A" Cedar Bevel Siding.
8, 10 and 12 inch CLEAR CEDAR FINISH.
EXTRA XXX RED CEDAR SHINGLES.

Eastern Agents, Gull River Lumber Co., Ltd., Lindsay, Ont.

Head Office and Mills, Port Moody, B.C.

Eastern Canada White Cedar Shingles

Close delivered prices will now be quoted to all points in Ontario for immediate shipment in all grades.

Either Short Count Standard or Full Count supplied as required.

This stock is bone dry and ready for quick delivery.

Special: A special price will be made this month on

CLEAR WALLS and Extra No. 1s.

to reduce stocks.

All Stock manufactured on our Standard Grading Rules which assures uniform high class Shingles.

The North Shore Shingle Association

of Eastern Canada

Write or wire for quotations.

F. G. WHEATON, Amherst, N.S.

Canadian Sales Agent

JOHN McKERGOW, President — W. K. GRAFFTEY, Managing-Director

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Wholesale Lumber

Ottawa Office: 46 Elgin St. — Montreal Office: 759 Notre Dame St., W.

CHRISTY-MOIR CO.
149 Broadway, New York City

Wholesale Dealers
13 Foot **SPRUCE** 16 Foot
Lath and White Cedar Shingles

Sales Agents: Iberville Lumber Co.
Sault-au-Mouton, P.Q.

James P. Grant — John K. Campbell

Grant & Campbell

Manufacturers of
SPRUCE, HEMLOCK TIMBERS AND PILING AND LATH

Prices promptly given on all enquiries.

New Glasgow, N.S.

FOR SALE
HARDWOOD LUMBER
Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
PHONE 37 — RESIDENCE 15
JOHN P. NEWMAN Wiarton, Ont.

HAEBERLE LUMBER CO.
LUMBER AND TIMBER
White Pine, Norway, Yellow Pine, Hemlock
Oak Mouldings, Doors, Sashes and Blinds, Cedar Poles and Ties.
Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
NIAGARA FALLS, N.Y.

Hardwood Flooring
The Celebrated Diamond Brand
End Matched, Bored, Polished and Bundled
Manufactured by
SIEMON BROS., LTD.
For prices write
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Selling Agent for Ontario and Quebec
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Lumber

Good Grades — Right Prices — Prompt Shipments

Canadian Hardwood. National Grading Rules

Birch
Basswood
Maple
Elm
Beech
All Thicknesses

Also full line in

White, Red
and
Jack Pine
All grades and sizes.

Get in touch with us for prices

C. G. Anderson Lumber Company, Limited

Manufacturers and Strictly Wholesale Dealers in Lumber

206 Manning Chambers
Toronto

WE Buy, Sell and deal in all kinds of Lumber and Timber in Canada and United States: Spruce, White Pine, White and Basswood, Ash, Cedar, Douglas Fir, Beech, Birch, Walnut, Cherry, Chestnut, Cottonwood, Hemlock, Maple, Norway Pine, Short and Long Leaf Yellow Pine, Oak, Redwood, Birch, Maple and Oak Floorings, Pulpwood Ties, and Cedar Poles.

AUGER & SON
QUEBEC

The Canada Wood Specialty Co., Limited
Manufacturers:
Lumber, Hardwood Flooring, Handles, Poles, Bed Frame Stock, Cheese Box Hoops, Heading, Baskets, Etc.
Write, Telegraph or Telephone your orders
Orillia, Ont.

R. LAIDLAW LUMBER CO.
LIMITED
Toronto
Sarnia
Buffalo

The Rimouski Industrial Co., Ltd.
(La Cie Industrielle de Rimouski, Ltee.)
Dressing of wood in transit on the Intercolonial Railway.

SPECIALTIES
Sawed Hemlock
Red Cedar Shingles
White Pine Lath
Bass and Poplar Siding

James Gillespie
Pine and Hardwood
Lumber
Lath and Shingles
North Tonawanda, N.Y.

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TIMBER Estimates, Topographic and Boundary Surveys, Planting, Logging Maps, Portable Mill Operations.

Technical Training Thoroughness
Experience

141 Centre Street
OLD TOWN, MAINE

The Penetanguishene Planing Mill Sash and Door Factory

Planing of all kinds done by carload. Railroad Switch in connection with mill. All classes of building material, lime and cement for sale.

ALPHONSE TESSIER, Builder & Contractor
PENETANGUISHENE, ONTARIO

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Baughman's Buyer & Seller, 75c.

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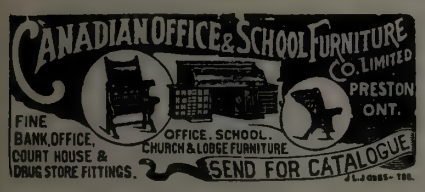
347 Adelaide St. West, Toronto, Ont.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OFFICE, SCHOOL, CHURCH & LODGE FURNITURE
SEND FOR CATALOGUE

J. J. MURPHY & CO.

LUMBER and TIMBER

Spruce, Hemlock, Pine and Hardwoods

Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.

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Do you know the worth of your Timber Lands?

My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,

Whether you want to buy, bond or sell I can be of service to you.

F. R. MEIER
Consulting Forester
1 Broadway NEW YORK

Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna. Forest Commission, etc.

"Well Bought is Half Sold"

"A Column on Lath"

200 M 1½"—4' No. 1 W. P. Lath
200 M 1½"—32" Nos. 1 & 2 W. P. Lath
200 M 1½"—36" Nos. 1 & 2 W. P. Lath
900 M 1½"—4' No. 1 Hemlock Lath
275 M 1½"—4' No. 2 Hemlock Lath
300 M 1½"—32" Nos. 1 & 2 Hemlock Lath

1915 Cut, at Byng Inlet.

2 cars 1½"—4' Merch. Spruce Lath

1914 Cut, at Gravenhurst.

5 cars 1⅜"—4' Nos. 1 & 2 Red Pine Lath

1914 cut, at Rockland.

2 cars 1½"—4' Nos. 1 & 2 White Pine Lath
3 cars 1½"—4' No. 3 White Pine Lath

1915 cut, at Waubaushene.

Write us for prices.

ALL ARE CHOICE LOTS.

Graves, Bigwood & Co.

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Pine and Hemlock Lumber

1026-32 Traders Bank Bldg, Toronto, Ont.

Mills: Byng Inlet, Ont.

We are Buyers of
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Veneers (5 or more ply) Handles (all descriptions)
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PRESSES
Hydraulic and Screw
for
VENEER
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Special machinery made to order
WILLIAM R. PERRIN
TORONTO, CANADA Limited

WASTE ELIMINATION
IN LOGGING OPERATIONS
My reports show where the waste is, and how it may be eliminated.
D. E. LAUDERBURN, Forest Engineer
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Civil Engineers, Quebec Land Surveyors and Draughtsmen
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Phone 2718
are prepared to examine and report on forest properties anywhere. Forest surveys, Logging maps, Timber estimates, Water Power, Water Storage, Topographical plans, Water supplies, Park Works, General plans for village sites and Private Estates. Railroad location and construction. Roads and Rivers improvements. Good information concerning Quebec Timber and Mining lands, cheerfully given.

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Wholesale

Red Pine White Pine Spruce

ESTABLISHED 1855

THE McGIBBON LUMBER CO.

OF PENETANGUISHENE

Manufacturers of and Dealers in

Lumber, Lath, Shingles, Etc.

HEMLOCK BILLSTUFF a Specialty of which we have the Best Assortment on Georgian Bay.

Don't wait to write. Phone us your requirements.

All stock sized or matched if required.

Our Yards are Unequalled for Drying Lumber

To the Owner of Timber Lands

Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

L. E. Campbell Lumber Company

Cruising and Engineering Department

2234 Dime Bank Bldg. - - DETROIT, MICH.

California White Pine
California Sugar Pine
and Arizona Soft Pine

Best Stock for Factory and Pattern Lumber

Ask **LOUIS WUICHET**

Room 716 Railway Exchange, CHICAGO, ILLINOIS

T. H. Garrett Lumber Co.

Manufacturers of . . . . . **YELLOW PINE LUMBER**

Mills :—
Selma, La.
Jena, La.
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Buena Vista, Ark.

Long Leaf Timbers, Short Leaf Finish and Railroad Material

Send your inquiries and orders to :—

General Sales Office

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F. N. WALDIE, President. R. S. WALDIE, Vice-President. W. E. HARPER, Secretary.

The Victoria Harbor Lumber Co., Ltd.

Manufacturers of

Lumber, Lath and Shingles

Mills at Victoria Harbor, Ont.

HEAD OFFICE,
12-14 Wellington Street East, TORONTO, ONT.

Charlemagne & Lac Ouareau Lumber Co.
Mills: Charlemagne, Montcalm, St. Adele

The Gres Falls Company
Mills: Three Rivers and Cape Madelaine

St. Gabriel Lumber Co., Limited
Mill: St. Gabriel de Brandon
Head Office: 524 Board of Trade, Montreal, P.Q.

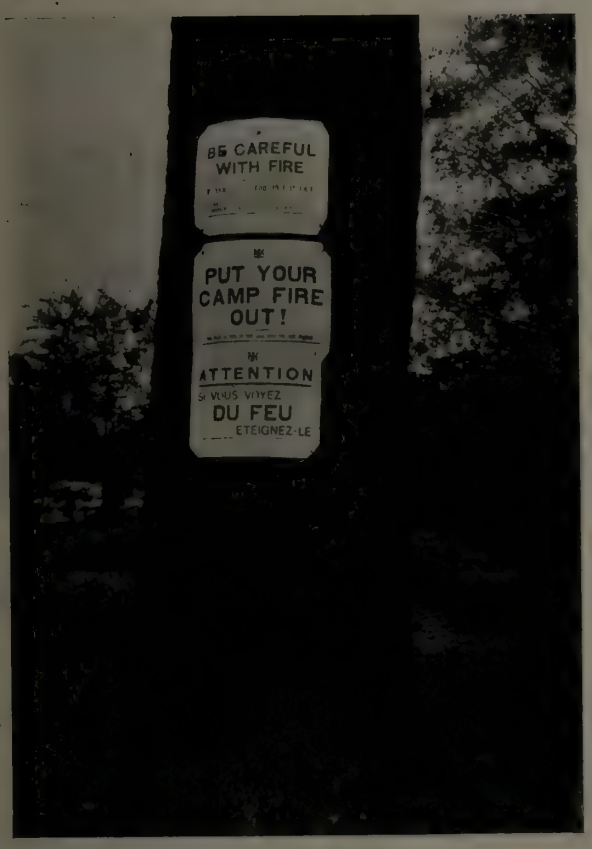
Manufacturers of
Spruce and Pine Lumber and Ground Wood Pulp

We handle
Everything in Lumber

Write or wire for prices and stock lists.

The McLennan Lumber Co.
Limited
21 Dorchester St. W. Montreal, Que.

ONTARIO
Help Protect Ontario's Forests



Ontario receives over $1,500,000 Annual Revenue from its Forests.

Ontario's Production of Lumber, Ties, and Pulpwood creates a Woods Pay-Roll of over $12,000,000.

Further Manufacture of Ontario Wood Products creates a Pay-Roll of over $20,000,000.

The Total Pay-Roll means $13 yearly for every Man, Woman and Child in the Province.

Fire means **your loss**

Protection means **your gain**

Take No Chances With Fire

HON. G. HOWARD FERGUSON,
Minister of Lands, Forests and Mines.

Edward Partington Pulp & Paper Co.
Limited

Head Office: ST. JOHN, N.B.

Mills: St. John, N.B. Blackville, N.B. Nanudogan, N.B. Marysville, N.B.

Manufacturers of—

Bleached Sulphite Pulp

Spruce, Pine and Hemlock Lumber, Laths, Hardwoods

The C. Beck Manufacturing Co., Limited

PENETANGUISHENE, ONT.

U. R. YY.

If you buy some of the following for your trade, for ***"WE AIM TO SERVE YOU WITH THE BEST."***

1 car 1 x 7 and wider No. 3 Cuts and Outs.
1 car 1 x 4 and wider Barky Strips and Shop.
50,000 ft. 2 x 6 — 20 Norway.
50,000 ft. 2 x 8 — 20 Norway.
8,000 ft. 2 x 10 — 20 Norway.
12,000 ft. 2 x 1 2— 20 Norway.
150,000 ft. 1 x 4 to 9 Common.
50,000 ft. 5/4 x 4 to 9 Common.
120,000 ft. 1 x 12 Common.
40,000 ft. 5/4 x 12 Common.
14,000 ft. 2 x 6 — 20 and 22 Norway.
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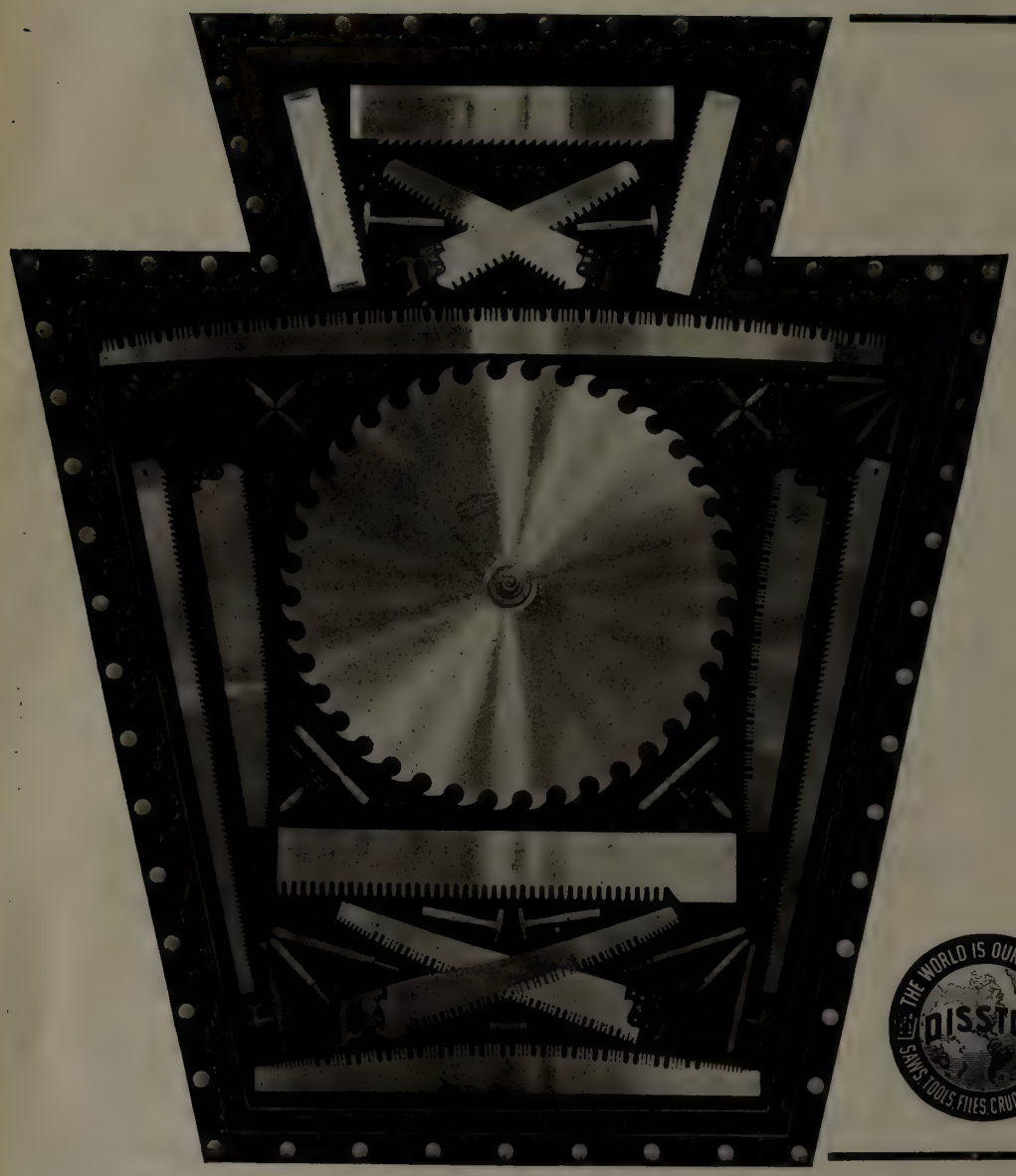

Keystone No. 1

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Saws, Tools, Files

Henry Disston & Sons, Ltd.
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Our Mills Produce and We Market as Much

GENUINE LOUISIANA RED CYPRESS

As All Other Concerns Combined

250,000,000 feet constantly in stock insures filling any reasonable order promptly.
Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

Our salaried salesmen receive credit for mail orders. Try us.

LOUISIANA RED CYPRESS COMPANY

Hibernia Building New Orleans, La.

Machinery and Timber For Sale

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the Town of Parry Sound, Ont.; and other Lumber Equipment, including boom chains, plows, sleighs, etc.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

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1 Log-loader.

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2 Roger Gang Edgers for 8-in. cants and lumber.

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2 2-saw trimmers.

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1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

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2 Lath Trimming Saws.

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1 Lap Grinder.

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2 Double Duplex, high pressure Water Pumps.

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1 Wood Machine for 16-in. wood.

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1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

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Rough and Dressed Lumber and Lath

We specialize on cutting to order all sizes of

Dimension Timber

Also in Dressing in car or mixed lots 1″, 2″ and 3″ to customers' specifications.

Complete stocks always ready for prompt shipment.

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"DUNBAR" Logging Engines are built in Canada to meet the need for sturdy substantial engines in Canadian logging operations. A close study of the conditions existing in this industry enables us to design engines which would give the greatest amount of service at the lowest possible cost.

If you are interested in logging machinery we will send you details. Write us. We are the makers of the original Shingle Machine, "Dunbar" Lath Machine and "Dunbar" Clapboard Machine.

Remember the maker's name

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Manufacturers of Hardwoods—Any Thickness From

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Yards at—Nashville, Tenn. Basic, Va.
Mills at—Sumter, S.C. Winchester, Idaho

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4/4 No. 1 Common, 3 cars.
5/4 No. 1 Common, 1 car.
6/4 No. 1 Common, 2 cars.
8/4 No. 1 Common, 2 cars.
4/4 Sound Wormy, 3 cars.
5/4 Sound Wormy, 2 cars
8/4 Sound Wormy, 1 car.

POPLAR:
5/8 Reg. 1s and 2s, three cars.
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4/4 Reg. 1s and 2s, four cars.
5/4 Reg. 1s and 2s, one car.
6/4 Reg. 1s and 2s, one car.
10/4 Reg. 1s and 2s, one car.
12/4 Reg. 1s and 2s, two cars.
16/4 Reg. 1s and 2s, three cars
4/4 No. 1 Common, 4 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 2 cars.
5/8 18-23, two cars, Panel and No. 1.
4/4 24-27, three cars, Panel and No. 1.
4/4 18-23, two cars, Panel and No. 1.

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5/4 1s and 2s, 3 cars.
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6/4 1s and 2s Plain, 6 cars.
7/4 1s and 2s Plain, 7 cars.
8/4 1s and 2s Plain, 7 cars.
5/4 No. 1 Common, 3 cars.
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4/4 Qtd. 1s and 2s, 4 cars.
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PLAIN RED OAK:
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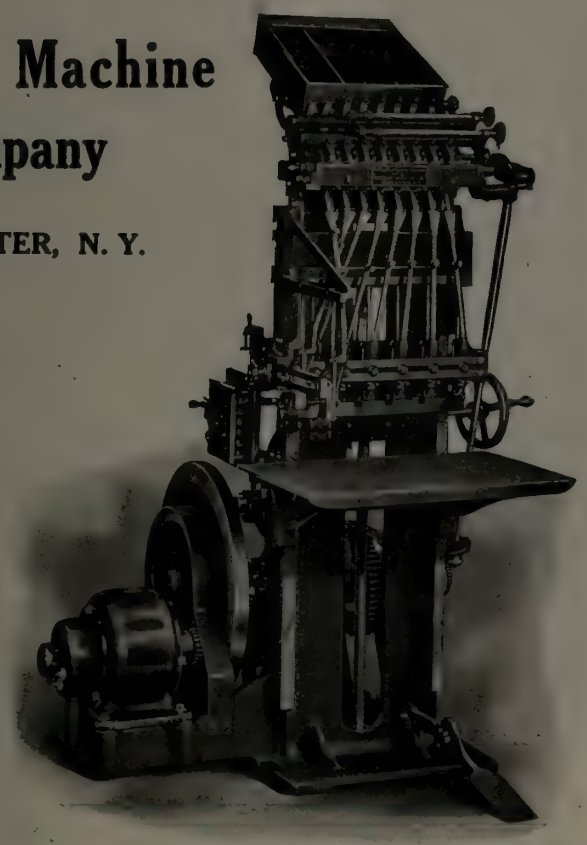
Morgan Machine Company

ROCHESTER, N. Y.



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Lock Corner Box Machinery,

Box Board Matchers,

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Every manufacturer of boxes; every manufacturer who has nails to drive in any article, or packages of any kind to manufacture, should write the Morgan Machine Company for latest developments in machinery for the Box Industry.

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New Brunswick White Cedar Shingles

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Laths and Ties **CAMPBELLTON, N.B.** Pulpwood

One Setter Can Work All Day With This Machine

Our Four Inch Steam Set

with enclosed dirt proof ratchet set works

The great saver of time, money and energy in the saw mill.
Will cut more lumber because it is steam operated.
Will manufacture better lumber because the piston travel is exact.
Will set up to four inches with one throw of the lever.
Easier to handle than any hand set works.
Easy to instal and connect up to any carriage.
Always carried in stock for immediate shipment.

We build everything needed in a Saw Mill.
Get our catalognes.

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Peterborough, Ontario

Western Agents: J. L. Neilson & Co., Winnipeg

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Manufacturers

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Our plant covers 110,000 square feet.

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(We Manufacture All Our Own Goods)

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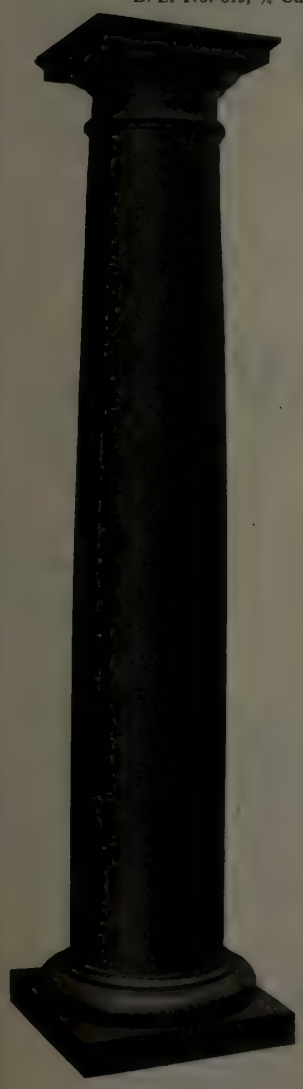

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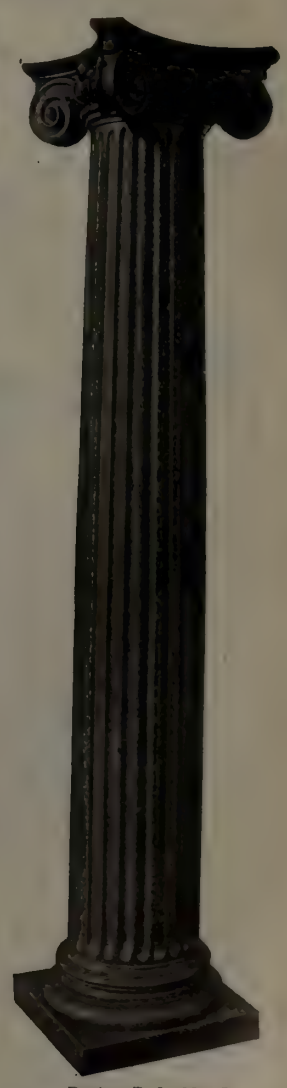
Design B. L. No. 3

Design B. L. No. 4



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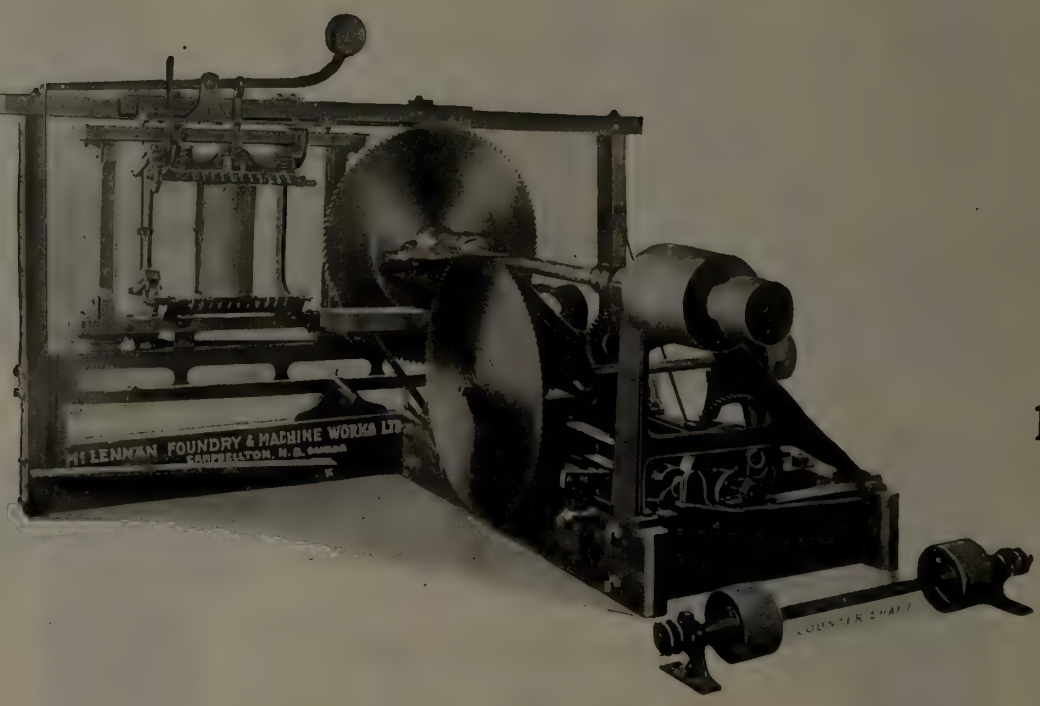
Substantially Built

Everything Necessary

Nothing Superfluous



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Campbellton, N. B.

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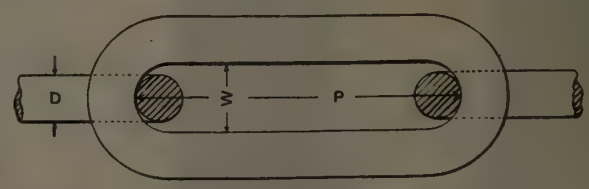
You will note that we are taking it for granted that you are using our chain, but as ninety per cent of the lumbermen are, we feel that we are not taking too great a liberty.



Standard Conveyor Chain and Ajax Dredge Chain

are the leaders in their respective fields, and there's a reason—quality, service and dependability.

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Berlin

BAND SAWING MACHINERY

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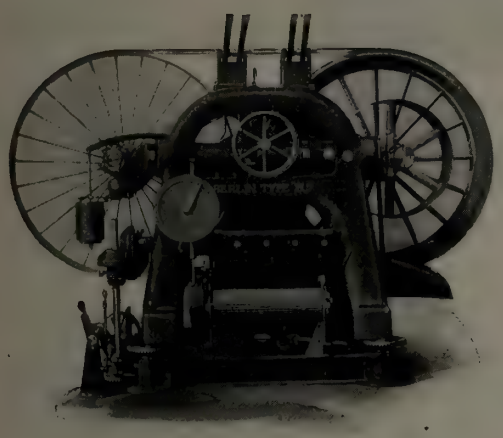
The Owner is satisfied with profits

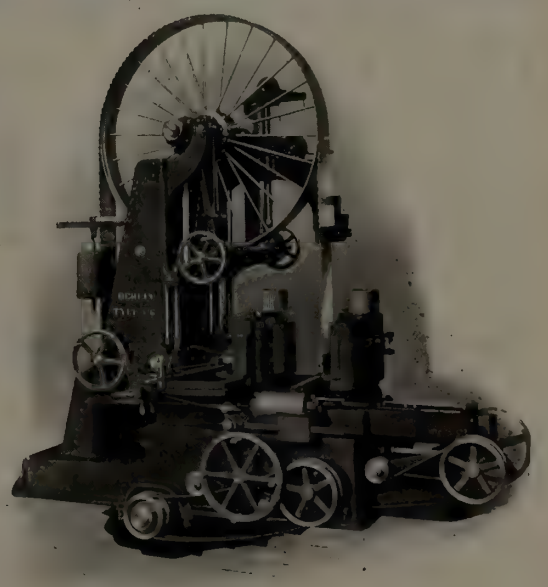


This horizontal type will relieve your head mill of sawing to finished sizes, particularly on low grade stock and slabs, flitches, half logs or square edge stock. The advantages enabling this type of machine to increase your production from 50% to 100% at slight additional cost are clearly explained in our "Type H" booklet series, ***Copies will be sent you free on request.***

The Superintendent is satisfied with production

The Inspector is satisfied with quality

—when a Berlin New Type Re-Saw is used



The Operator is satisfied with his machine.

Berlin Machine Works
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Largest Manufacturers of Woodworking Machinery in the World

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This vertical type is adapted essentially to high grade lumber manufacture. By cutting two finished pieces from square edge stock dropped to it by the mill, output is increased enormously at minimum production cost. We'll forward you valuable information concerning the saving you can effect. ***There's no obligation—just ask for our "Type V" booklet.***

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Panama-Pacific International Exposition, San Francisco, 1915.

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Canada Lumberman & Wood Worker

Issued on the 1st and 15th of every month by

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HUGH C. MacLEAN, Winnipeg, President.
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Single copies 15 cents.

"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

Authorized by the Postmaster General for Canada, for transmission as second class matter.

Entered as second class matter July 18th, 1914, at the Postoffice at Buffalo, N.Y., under the Act of Congress of March 3, 1879.

Vol. 35 Toronto, August 15, 1915 No. 16

Opportunity Knocking—Who is Ready?

We do not wish to appear partisan to the optimistic or the pessimist in the widespread discussion now going on as to the great opportunities for increasing Canadian trade in the countries which have been devastated by the war. One or two things which have lately come to our attention, however, are of so much interest and importance in this connection that we think our readers ought to have them continually brought to their attention until the present trade conditions have improved. One of these subjects seems to be a simple enough one, but it will be found to involve a lot of thought and hard work before it can be worked out to a successful conclusion. The idea we refer to, is that, in the devastated lands of Belgium and France there will soon be an interesting and important opportunity for introducing to the European mind the many and great advantages of the wooden shingle. In another part of this issue we have published a letter from one of our western readers dealing with this subject from the point of view of the manufacturer of the red cedar shingle. The ideas which he sets forth will apply with just as much force to the manufacturers of eastern shingles.

European nations have been from time immemorial in the habit of building their houses of materials which were brought into use long before man had developed the art of manufacturing many of the modern wood products. As a result it has been impossible to tempt the European mind away from thatch and slate and other forms of roofing, in favor of wooden shingles. But to-day the situation is one which works out in favor of the wooden shingle. Something is wanted which lends itself to the rapid construction that will be so essential, and which at the same time embodies to as great an extent as possible the feature of permanence. The wooden shingle is notable for these characteristics and also for its remarkable serviceability. The present opportunity, therefore, should be made use of to the utmost, as it involves, not only the sale of large quantities during the reconstruction period, but an unexampled opportunity for introducing the wooden shingle among people who have been prejudiced against it, and thus laying the foundation for future trade on a very large scale.

Closely associated with this matter is the more general question of making the most of the opportunities for the development of Canadian trade in wood goods in general in Europe. We have dealt with this to a considerable extent in other issues, and in another article in the present issue. One feature perhaps, we have not dwelt upon so strongly as we should have; namely, the importance of co-operation among the lumbermen and the wood-working companies, with a view to preparing in advance for all the business that it will be possible for Canadians to obtain. The alleged order for 20,000 houses which was said to be about to be placed in New York recently, naturally stirred up a few Canadian firms to a proper appreciation of the situation and steps have already been taken to enquire as fully as possible into the whole situation, with a view to gathering all possible information regarding materials likely to be required and regarding the equipment of Canadian firms to handle the orders when they commence to appear. It will only be by means of co-operation of the most systematic and complete nature that Canadians will be able to reap all the advantages they should from the situation and it is therefore to be hoped that the steps now under consideration will be successful and lead to something very definite in the way of co-operation.

Twenty Thousand Portable Houses

Ever since the outbreak of the war the Canadian lumber trade and industry have been keenly on the watch for opportunities to share in the great volume of trade resulting from the requirements of the allied governments for wood goods of many kinds to be used by the armies in the field, for the transport departments, by those who are charged with the erection of temporary houses and by many others who make use of large quantities of wood products. The volume of this class of business is almost beyond comprehension and the Canadian trade has already shared in it to a considerable extent. About July 23rd, however, a press despatch coming from New York stated that an order for 20,000 portable houses for use in Belgium and France was being negotiated for in New York and was likely to be closed there, the business going to the United States plants.

The Canada Lumberman realizing that such a report, whether true or not, was of sufficient importance to justify immediate action on the part of Canadians; in the first place to endeavor to turn the order and future orders to Canada, and in second place to put those who have the giving out of such orders in possession of information regarding the capacity of Canadian plants to fill almost unlimited orders for such goods. We notified the Department of Trade and Commerce and wrote to a large number of Canadian firms who would be interested in such business. The replies we have received show conclusively that Canadian plants should have all of this class of business that they can handle, in preference to plants in the United States; and that, so far as ability to produce the houses is concerned they are in an excellent position to meet any requirements. There are a large number of plants with the best possible equipment for such work, which are not running at anything like their full capacity. These firms are anxious for the business. They could quote very close prices and give as good delivery as any plants in the United States. From a business point of view the buyers of portable houses in England and Europe would be acting in their own best interests by getting quotations from Canadian firms. From the patriotic point of view nothing need be said. Our claim in that regard is unquestionable, although it is doubtful whether it would be urged by Canadians, were it not for their ability to deliver the goods satisfactorily in competition with the world.

We are glad to advise our readers that the information we have now secured is to the effect that the press report referred to above was apparently unfounded. It has served, however, an excellent purpose in having stirred up Canadian manufacturers to a proper

realization of the opportunities which may be presenting themselves almost any day, and it has given the Canadian Department of Trade and Commerce definite reason for enquiring fully into the capacity of Canadian plants and laying before the proper parties in Great Britain and elsewhere the claims of Canadians for first consideration in connection with such business. We believe that the Department of Trade and Commerce will follow this matter up closely and be prepared, so soon as any such orders are definitely under consideration, to advise Canadian manufacturers of the opportunity, and to give the Governments requiring the goods the fullest information about Canadian facilities for supplying them. In fact, no time should be lost in placing before the British and European governments all the information that can be obtained upon the subject, so that the trade will come in our direction naturally.

When portable houses or other wood goods are required for such purposes they will be required quickly, and there will be no time to waste in gathering information. All the information should be in the hands of the governments long in advance. It is important for Canadians therefore, to see to this point at once. The Department of Trade and Commerce may be depended upon to do its best in this regard, but Canadian manufacturers should also assist the Department as fully as possible by putting them in possession of all the facts that they can regarding the ability of Canadian firms to handle orders.

One of our correspondents referring to this point suggests that the Canadian Manufacturers Association should establish something in the form of a clearing house for war supplies through which the various Canadian plants could establish their ability and capacity to handle war orders. So far as we can see at first glance such a proposition seems thoroughly feasible. Without some such clearing house arrangement it is inevitable that many orders will be placed to the disadvantage of those who are making the purchase and of firms which could handle them. One of our correspondents makes the suggestion that Canadian firms have not been as wide awake to their opportunities in connection with war orders as they should have been and that much good business could have been secured by a more energetic business policy. The most certain way in which to remove such a criticism of our manufacturers is to establish some system of gathering and submitting information about Canadian productive capacities; we hope that definite steps in this direction will be taken without delay.

Export Trade with Great Britain

A letter which we published in our issue of June 1st, written by Messrs. Charles T. White and Son, Sussex, N. B., complaining about the difficulties which they experience in conducting their export trade with great Britain, has attracted considerable attention from our readers. As was to be expected, a subject of this sort brought forth divergent views. Our idea in calling attention to the different views is not to create any discussion but to assist in clearing up the situation for those who have been having any trouble such as that of which Messrs. Charles T. White and Son complain. For this reason we are pleased to publish in this issue a letter from a very prominent firm of timber brokers in London, Eng., who have been sufficiently interested to write us about the matter. We feel that their letter, while not seeking to raise any argument, pro or con, about the subject, presents the matter in a light which will probably go a long way towards explaining to Canadian shippers the conditions which prevail in connection with the trade in Great Britain.

The chief point made in the letter from the English brokers is a very matter of fact one which makes it look as though Canadians who have not found everything to their liking in connection with the trade in Great Britain have themselves to thank to a considerable extent. The firm, one of the most reliable and widely known in Great Britain, states that a Canadian who wishes to sell his stocks in Great Britain need never imagine that he has to send any of it by way of United States ports because of any discrimination against the grading of Canadian stocks. All that is necessary is for the Canadian shipper to get into touch with an English broker of reliable reputation and, as our correspondent says, confine his business to that one firm, because, if he permits more than one firm to handle his stocks, he will find before long that he is competing against himself to his own serious disadvantage.

Our correspondent shows a strong desire to get into touch with Canadian shippers with a view to doing business with them direct. The Canada Lumberman will be pleased to place any Canadians who desire it in touch with this firm, which is an eminently successful and reliable one. We are able at the same time to give our readers the names of many similar firms which have conducted a successful business for many years.

The Hemlock Situation

A few Ontario lumbermen who are chiefly interested in the production of hemlock held a meeting recently at which they discussed the present market situation. The ideas expressed at the meeting were embodied in an editorial article which we published in the Canada Lumberman of August 1st, and which we drew to the attention of a number of others who are in a position to analyze market conditions and express useful opinions regarding them. Among those who have been interested enough to respond by putting their views their views in writing is Mr. A. C. Manbert of Graves, Bigwood & Company, Toronto, whose letter is published elsewhere in this issue. All manufacturers and dealers in hemlock in Ontario should read this letter and take it to heart. We believe that it places the matter in such a clear and concise manner as to carry conviction, and at the same time to bring undoubted comfort to those who have been unable until now to see far enough into the future to feel at all optimistic.

What we tried to say in our editorial, Mr. Manbert has expressed with great simplicity and has added to it a definite and encouraging glimpse into the future. Taking the facts as set out in Mr. Manbert's letter, and realizing that he speaks out of the fullness of exceptionally ample experience, we are led to the conclusion that the hemlock situation has passed through its downward price period and has entered upon a new period which is to be characterized by gradual elimination of the lower grade stocks available, until better prices have been automatically put into effect by the natural operation of supply and demand. Most of the factors which depressed the price have been removed and the last of these, the competition of poorly manufactured stocks produced by small mills is in the process of elimination by the gradual absorption of these stocks in a very quiet, but fairly steady market. Already the influence of these stocks has been reduced to a sufficient extent to warrant one in concluding that in another month "additional evidence will be brought forth" to convince the manufacturers and owners of desirable stocks that their turn has come. The market to-day is probably best described as a midway stage, characterized by a gradual disappearance of those features which recently made it only a purchaser's market; i.e., one in which the purchaser was able to get his stocks at prices considerably below the cost of production, and in which the greatest sufferer was the man who produced good stocks and felt that he had to sacrifice them at the going prices. Mr. Manbert's opinion is that the purchaser has seen his day. He bases this opinion upon the evidence which he has received from both ends of the trade, from the retailer and from the manufacturer. With his ear thus close to the ground, he confidently makes the statement that "desirable stocks are not being offered at the pleasure of the purchaser as to selection and price, with the result that a gradual strengthening is developing and in our judgment will continue increasingly."

Mr. Manbert's views can be summed up in a statement that the period of ruinous competition is passing away with the absorption of existing low grade stocks which must be followed by the absorption of the desirable stocks; that the consumption is steady although greatly reduced; that the output this year will be reduced by 40 per cent. at least, and that those who have been lamenting the unsatisfactory conditions of the past year may sit down confidently and expect some little improvement at least before many months have passed.

The Reader's Viewpoint on Trade Topics

Canadians Ready for Portable House Orders—Hemlock Situation Improving—Canadian Trade with Great Britain

Articles or letters to the Editor of the Canada Lumberman, dealing with trade conditions, or discussing questions of interest to manufacturers, wholesalers or retailers of lumber are always welcomed by our readers. Here are a few that have been received lately:—

Are Canadians Getting a Fair Share of War Orders?

Editor Canada Lumberman: Orillia, Ont.

Replying to your letter regarding order for 20,000 portable houses ordered in the United States for the Allies: we understand this order was handled by the British War Office and it certainly seems anything but fair that Canadians should be passed by in this way.

If any business has been hit by the war it is the lumber business and particularly the millwork end of it. It was one of the first to be hurt, one of the hardest hit, and liable to be one of the last to recover.

Portable houses can be made here just as well as in the United States. There are thousands of wood-workers for whom there is little or no work at present. We also have the lumber, spruce, pine, and hemlock, which will no doubt be used for these houses. The United States buys largely from Canada, and it is a downright shame that we are not allowed to do the work when we need it so badly, besides keeping the money at home instead of sending it abroad.

What is our Trade Commissioner in the Old Country doing? There is slackness somewhere and someone is not on the job as he should be or Canada would get a decent share of orders in this and other lines instead of the driblets that have come this way in the past.

We cannot protest too strongly against the lack of success so far in securing an adequate share of munitions business for Canadians and hope pou are starting a campaign which will wake up the officials and lead to Canadians getting their due.—J. R. Eaton & Sons, Limited.

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Are the Opportunities Being Neglected?

Editor Canada Lumberman: Guelph, Ont.

In reply to your favor re contract for 20,000 portable houses, would say that if the Canadian manufacturers looked after their own interests the way they should be, this order need not have been placed in the United States. We have secured some nice business over there, and we consider we are not in a position to criticise.—Robert Stewart, Limited.

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B. C. Ready for War Orders

Editor Canada Lumberman:

We have at various times in the past heard rumors of sending orders for large quantities of ready-cut lumber to be used for the construction of refugee houses in France and portions of Belgium, but upon investigating these rumors and running them down to headquarters, we have found that they were rumors, entirely, and that the different governments were not in the market for any lhmber for this purpose.

The mills in British Columbia have stocked upwards of 300 million feet of lumber, all of which could be cut to order for ready made houses, and I am quite sure that this lumber can be supplied at less cost than any place on the American Continent.

I believe that the Department at Ottawa, throuh their special trade commissioner, Mr. H. R. MacMillan, who has spent now some little time in London and Paris, are fully alive to the necessity of bringing business of this kind to the Canadian mills.—Canadian Western Lumber Co., Limited.

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Canada Could Supply the Portable Houses

Editor Canada Lumberman: Hamilton, Ont.

We have your favor regarding an order for 20,000 portable houses which are being negotiated for in New York by Great Britain. We see no reason why the 20,000 portable houses could not be built in Canada equally as well as in the United States, as few of the planing mills are working more than half their capacity, and with plans and specifications there are a very large number of factories, if the orders were distributed, which could complete the 20,000 portable houses in a few months' time.

We hope you can do something to turn these orders to Canada and help the lumber business, as it certainly requires many such orders before it will be on reasonably profitable basis.—The M. Brennen & Sons, Limited.

Could Deliver the Houses at Attractive Prices

Editor Canada Lumberman: Ottawa, Ont.

In connection with the report that the British Government have purchased some 20,000 portable houses in the United States, we submit that this order might very well have been placed in Canada where it is very badly needed at the present time in the lumber trade. No doubt approved designs were prepared of houses to be purchased, and, at least, the opportunity of quoting thereon might have been afforded the Canadian lumbermen, who are in a position to get out orders of this kind. We certainly would have appreciated the opportunity to quote, and not only feel that with our plant and equipment now available, we could have quoted a price sufficiently attractive to procure an order, but as well have given very good delivery on a considerable quantity.

In the event of this order not having been placed, but the report in the paper being premature, we certainly think the Canadian firms should be afforded a chance to secure this business.—The McAuliffe Davis Lumber Company, Limited.

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Portable Houses—Canada Should Get the Orders

Editor Canada Lumberman:— Bathurst, N. B.

Your letter of the 24th is just to hand and we would say in reply that we would be very glad if you would protest strongly on the matter of the building of the 20,000 portable houses in the United States for France and Belgium, instead of in Canada. We think that this certainly is business that should come to Canada instead of going there, and anything that can be done to put this matter up to the Government to try and get conditions changed to favor this country would be very greatly appreciated by the lumber trade here.—Bathurst Lumber Company, Limited.

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Prompt Action of Great Importance

Editor Canada Lumberman: Midland, Ont.

Replying to your favor regarding the reported order for 20,000 portable houses to be manufactured in the United States and to be used in Belgium and France.

We appreciate your quick action in this matter and would surely like to do anything we could to see business of this kind placed in Canada. You ask us to express our views on the subject but we are compelled to say that we cannot offer any criticism regarding the placing of this order, as we do not know sufficient of the facts and it may possibly develop that this is nothing more than a rumor.

In anticipation of such orders being placed in the future, **we would suggest that all those interested should take the matter up promptly with the Department of Trade and Commerce at Ottawa, have representations made as to the ability of the Canadian manufacturers to handle a contract of this nature and with such information placed before the proper authorities, the probability is that Canadian manufacturers would have the first chance at any business of this kind.**

So far as we are concerned we would welcome an order of this nature, as we are equipped for this very class of work and are satisfied that we can meet the requirements of quality, delivery and price.—Georgian Bay Shook Mills, Limited.

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Canadians Could Handle the Order

Editor Canada Lumberman: Brantford, Ont.

We have your favor of July 23rd, with regard to a report from New York of a contract for 20,000 portable houses to be manufactured in the United States and to be used in Belgium and France.

We wish to express in the first place our appreciation of the fact that you have the interest of the Canadian manufacturers and lumbermen so well at heart and that you have taken up this matter in the vigorous manner displayed by your letter.

The manufacture of portable houses requires special manufacturing facilities and familiarity with technical details differing from those of ordinary building operations. **There are plants in Canada which are able and ready to handle orders of this kind, and in our opinion the entire order in question could be conveniently handled within the required time.**

It seems to us that those mediums through which such orders are placed on behalf of the Imperial Government, should in the first place ascertain the ability and the capacity of Canadian plants before going to American concerns. Our Canadian Manufacturers' Association at the present moment could establish another field of activity besides those they so ably carry on, a sort of Clearing House for War Supplies, through which the various Canadian plants could establish their ability and capacity of handling war orders

and through which the Government could ascertain what kind of orders our Canadian manufacturers could handle. For certainly our Canadian loyalty to the Empire entitles us to that consideration, the more especially as we should handle such orders not merely for the money consideration, but with that special attention which our patriotism and loyalty inspire. And such a clearing house would be free from baneful political influences.

Just as soon as the report you mentioned was brought to our notice, we wired our export agents in New York for information, as they are in touch with all foreign markets. They report that an investigation on their part has disclosed that the rumor is without foundation and that no such order is being placed at this time.

We know that enquiries had been made within the last two weeks regarding portable houses for this purpose from Canadian firms, and we would venture to suggest that this rumor was entirely premature and that some firms on the other side upon receiving a similar enquiry took it for granted that they would receive the order.

We understand from certain sources that this order would not be placed without due consideration for the Canadian manufacturers to the full extent of what they are able to supply.—The Schultz Bros. Company, Limited.

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A Grand Opportunity for Canadian Trade

Editor Canada Lumberman:— Penetanguishene, Ont.

We have read with a good deal of interest your article on the report in some of the papers as to 20,000 portable houses to be made for Belgium by the combined countries of Great Britain, France and Belgium, and we are pleased to note that you have asked why Canadians are not supplying any, if there is any truth in it. To show that Canadians have been alive to just such a contingency we enclose a copy of a letter that we sent to the Department of Trade and Commerce last winter when things were dull and business wanted badly. At that time some such reports were current that orders were being placed for portable houses in Michigan and we had here a material that would give excellent satisfaction in this line. We had a note from the Department advising that there was nothing in these rumours, but usually where there is smoke there is fire, and if there are so many ideas that such a thing will likely be required, why does not the Department of Trade and Commerce make a market for it and line up the manufacturers to assemble these houses? We should judge there would be a good opportunity for such a step.—The C. Beck Manufacturing Company, Limited.

Editor's Note.—The letter from Sir Geo. E. Foster, Minister of Trade and Commerce, referred to in the above letter, was written on February 5th last, and stated that no enquiries had, up to that time, been received by the Canadian Government from the British or Allied Governments for portable houses. Sir George Foster added that he had also received a letter from London, stating that no orders for portable houses had been placed by the War Office, in the United States. He was inclined, he said, to think that possibly the American Belgian Relief Committee was securing these supplies, and the order had been confused with the intelligence that the British Government was erecting portable houses for the troops in training in England.

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What Should the Hemlock Price Be?—A Reader's Revision

Editor Canada Lumberman:— Toronto, Ont.

I have read your editorial "What Should the Hemlock Price Be?" which appeared in the Canada Lumberman of August 1st, and with your permission would like to suggest that, on the basis of the present attitude of the larger hemlock producers and jobbers, the situation could be presented stronger. In other words, I believe that whereas a short time ago the situation was accepted as being inevitably demoralized and uncontrollable, a different viewpoint now prevails. Any situation to be improved requires action, rather than discussion, and I believe this action is now being brought into play and will continue increasingly so, as the basic features affecting the hemlock situation are becoming better understood. Without presuming, I would like to suggest that your editorial might be developed along the following lines:—

The Hemlock Situation.—There was a time, not so very long ago, when the manufacturers of hemlock in Ontario were in dire straits on account of the severe competition which they had to meet from Wisconsin and Michigan hemlock, as well as from the products of the yellow pine mills of the south. Every meeting of hemlock men held in those days devoted much of its time to discussing this matter, and it seemed as though there was no possibility of improving the situation; yet in a comparatively short space of time this has been changed, and to-day this competition is of little or no importance, but the hemlock men still have their troubles.

Early in 1914 building in the large cities began to decrease, and with the advent of the war last August, almost complete paralysis resulted. In the larger centres particularly, retail dealers had fair stocks on hand or purchased, or both, and sought to adjust themselves to the situation by ceasing purchasing and working off their own holdings. This inevitably brought about ruinous competition among themselves and prices to consumers began to sag. As time went on, broken stocks and some new business brought them into the market, but as their selling prices were lower, they inevitably bore down the market, and this attitude with the reduced outlet, developed the same experience for the wholesalers as the retailers had been undergoing. In both cases there were some parties who were compelled to sell to meet obligations and price seemed no object. The result was that for a time a semi-panic prevailed and so far as hemlock was concerned, both producers and dealers seemed to be quite bereft of reason.

One extreme always brings about another, and out of chaos, a return to reason is now in progress. A sober consideration of the situation shows that no more hemlock has been sold or consumed than if the market had been reasonably maintained; in fact, probably not as much. All the while a steady but reduced consumption has continued and stocks are now low in the hands of all dealers. Tight money, prospect of a poor market and no outlet for bark, kept many producers out of the woods last winter. The result is that the hemlock cut this year will not be over sixty per cent. of what it was last year, and this is based on statistics, not estimates. Producers are coming to understand these facts and are learning that desirable stocks at mill points are comparatively small and in a few hands. The costs of production have in no wise decreased. With these facts known, desirable stocks are not being offered at the pleasure of the purchaser as to selection and price, with the result that a gradual strengthening is developing, and in our judgment, will continue increasingly. There are still some indifferent stocks on the market which will correspondingly affect prices, but the status of prime goods is better than has been the case for the past twelve months.

Perhaps what I have written is stronger than what you would want to put it. It is based on my own convictions and conversations which I had with interested people. I believe it is based on facts and I am offering it as a condition and not a theory.

I have purposely avoided any reference to any combined endeavor on the part of hemlock producers to raise prices. In the first place, I do not believe it can arbitrarily be done and I am opposed to any effort of that sort. I do approve of meetings which disseminate intelligence as to the general situation. Most of the retailers and consumers resent any attempt at combination; in fact, take little stock in its effectiveness in view of some of the meagre results from efforts in the past in that direction. I would like to have your article lay the foundation for future publicity and I am so confident that the situation is improving as I have suggested, that I believe in another month additional evidence can be brought forth to help keep the ball rolling.—A. C. Manbert.

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The Hemlock Situation—Present Price Nil

Editor Canada Lumberman:— Toronto, Ont.

Referring to your article on hemlock:—This is entirely a case of supply and demand. When the demand was good the manufacturers ran their prices up to $20 and in some cases $21. The present demand is entirely nil, and any person who has hemlock is prepared to take what price he can get for it, so I think it is impossible to regulate the price. All that could be done would be for the principal manufacturers and larger dealers to meet and set a price which they will not go below. The smaller and poorer class would then soon be out of the market, as it would not take long to use up the stock they have. The trouble in this would be that the men whose integrity should be beyond doubt will not or cannot trust one another to maintain the price.—W. J. Lovering.

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Hemlock Manufacturers—How About This?

Editor Canada Lumberman: Guelph, Ont.

We handle out of our yards at Guelph about three million feet of hemlock during the season; 90 per cent. of it Michigan hemlock, which we were at all times able to buy all the way from one to two dollars per thousand less than the Canadian hemlock.

The real reason why we prefer Michigan hemlock is on account of it being sized, and it is ready for delivery as soon as the car arrives at Guelph; whereas, the Canadian hemlock has all to be loaded on to the wagon, hauled to the saw, and then loaded on to the wagon again.

As regards the price of seventeen dollars for hemlock, we are afraid that the manufacturers will experience some trouble in obtaining that price, as we are just paying a trifle more than that delivered at Guelph, for American hemlock.

Another point about our Canadian hemlock is that no two concerns grade it alike. The No. 1 hemlock in Canada is equal to the No. 2 or merchantable in Michigan, and the No. 2 in Canada is not by any means equal to the No. 3 in Michigan. Twenty-five per cent. of the hemlock which is manufactured in Canada as No. 2, the proper place for it is under the boiler at the saw mill. —Robert Stewart, Limited.

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Hemlock Slump Practically Over

Editor Canada Lumberman:—

Hemlock lumber, like many other, if not all commodities, has experienced during the past twelve months much trouble, which has been brought about by unsettled conditions. One source of trouble affects others so that they join and increase the initial trouble. This I believe has applied to the hemlock trade of late, but the bright side to it is that we are at the turning point. We have reached the bottom, and manufacturers to-day realize that they must stop price cutting and settle down to real business. Trade conditions are unsettled and must be handled carefully, instead of being agitated by price slashing. Many manufacturers have, during the past few months, sold hemlock lumber at a price lower than it cost to produce. This was done, I believe, with a view to obtaining some money, the manufacturer possibly imagining that he required money much worse than he really did, and that he must sell. These stocks are now pretty well off the market and the trade is awakening to find how unwisely they have acted.

The use of lumber is much curtailed through unsettled conditions, and cannot be increased by price cutting. There is a fair amount of lumber being

used to-day by parties who urgently require it for building, and they are generally able to meet their payments. This is gradually bringing the trade into a much more healthy condition. The manufacturer knows full well that the supply of standing hemlock timber is very limited. During the past eight or ten years, and especially during the past four years, trade has been exceptionally good and manufacturers, large and small, have taken out every available bit of timber that they could possibly handle, which was convenient to the railway; they have also gone back a considerable distance and have cut so closely that there is no chance for any operator to go back over these limits in a few years' time and take off another cut. Many mills to-day are practically cut out and have no more standing timber in sight. Manufacturers, realizing this, are loth to go into the woods this winter and take out what little bit of timber they have left.

This story of hemlock timber becoming scarce has been repeated so often and there has still been so heavy a supply on the market, that many who are not in close touch with the standing timber resources are led to believe that the story is very much exaggerated by the manufacturer. Nevertheless, it will be realized that this fact is correct before many years. The two severe wind storms of two years ago, one on Good Friday and the other on November 8th, blew down a large amount of the thinly wooded forests and forced on the markets a large quantity of the timber which was found in the manufacturers' yards this spring. These stocks to-day are very much broken and many of them have been placed on the market at a very low price. The operation in the bush this winter promises to be very light and the price of hemlock will probably advance during the next few weeks to where the manufacturer can make ends meet and have a little profit. I do not anticipate any high price, but what I do anticipate and firmly believe that it must come, is an advance in price so that the manufacturer can exist, but not enough to warrant him operating heavily this winter, as he is fully aware that the price of hemlock before very long must come back to where it was eighteen months ago. Canada is a productive country and is learning more and more as time goes on that she ranks among the best countries on the globe in which to live. Consequently, she is bound to advance, and as soon as troubled conditions become a little more settled, trade is bound to advance in Canada on a good, sound, healthy basis.—Manufacturer.

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The Hemlock Market—A Tough Problem

Editor Canada Lumberman:— Penetanguishene, Ont.

We note your article in the August 1st Canada Lumberman in reference to the hemlock situation. As we are not very familiar with this (cutting chiefly red and white pine), we are hardly in a position to make any remarks on the situation. However, your statement that prices are ruled by the demand, is about right, as when things are booming prices are away up, and when there is not much demand the prices go away down, as there is always somebody to sell off their stock and keep the prices down; so that, unless they have a pretty hard and fast organization they cannot do very much in trying to regulate prices. Anyway, we cannot in the white pine market.—The C. Beck Manufacturing Company, Limited.

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An English Broker Solves the Problem

Editor Canada Lumberman:— London, Eng.

We have your letter of July 2nd and as our interests in the wood trade are very great we make the following remarks on the subject discussed in your Editorial regarding the trade in Canadian lumber with Breat Britain.

The question at issue in this article is a very large one, and we do not know if Messrs. Chas. T. White & Company have the facts before them, or have that intimate knowledge of the wood trade as carried on in Europe, which would enable them to give your readers information exactly how the Canadian lumber trade is carried on in this country and what would be the best means of helping to develop the wood resources of the Dominion without their being exploited by American firms first.

Canadian spruce, birch and all British Columbia woods come here direct. With regard to Douglas fir, a lot of the trade in this passes through houses located in San Francisco and Portland, but many of the biggest people, such as the British Columbia Timber & Trading Company, have their own agents in Great Britain and do their business direct with this country. Canadian basswood comes here direct. Canadian oak can be sold here as coming from Canada, just as well as from the United States.

Regarding the heavily printed sentence in your article, we shall be glad to know what "stock" it is that is shipped from Canada via Portland, Boston or New York. If any mills wish to sell hardwood to the United Kingdom and find that at present their goods have to go through United States agents, it is quite easy for them to find good and reliable agents here who will be able to sell for them, thus paying only a commission to a distributor here, but they would have to send some sample shipments with their brand on so that buyers could see what the product of the mill was like in order to make a start with c.i.f. selling, which is the only method that can be recommended in doing a regular trade. It would also be interesting to know what hardwoods they have suitable for the furniture trades.

Do your correspondents understand that the European trade is carried on entirely on a credit system and the agent here has to give six months' credit by bills on practically all the hardwood sold from the Continent of America and three months at least on all spruce and similar woods from Eastern Canada.

The above remarks may serve to help you in dealing with this question, and if any large manufacturers, who wish to do a European trade, will write to us on the matter, we shall be very pleased to see what can be done, but only on the understanding that if business is possible they will only have one agent for the United Kingdom, as we have always found that when two or three people offer the same manufacturer's goods the results are bad for the seller and so unsatisfactory for the agent that the business does not command much enthusiasm. If more than one agent is employed the same buyer is canvassed by two people with the usual result that he puts one agent against the other and the seller finds he has been competing against himself to his detriment, and to the buyer's advantage

The foregoing is not said in any selfish spirit, as the seller can look round and see among the several trustworthy firms in London and Liverpool which one he prefers to act for him, but, having done this, he must trust his agent implicitly on all questions of quality, condition and other matters that crop up, as buyers here are not accustomed to buy on any system of inspection on the other side being final, i.e., of course, if they are taking the goods c.i.f. ex ship or ex quay.—Broker.

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Hemlock Suffering from Price Cutting

Editor Canada Lumberman:

The real difficulty in the hemlock situation, to our mind, is simply the disturbed relation between supply and demand, and the fact that some of the larger manufacturers will sell at their own price irrespective of what the manufacturers seem to think the price should be. We have some hemlock of our own this year and we are getting about cost price for it and do not at the present intend taking out any stock whatever. Conditions later may cause us to change our mind.—Manufacturer.

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Blames the Larger Wholesalers

Editor Canada Lumberman. Marmora, Ont.

We note your article under date of August 1st entitled:—"What Should the Hemlock Price Be?" We think the trouble is fairly well expressed in your article. There seems to be more price cutting in the large centres than in rural districts and smaller towns. We then have the wholesaler from the large centres come out to the small mill man who has no selling representative, and lay bare the facts about conditions in the cities, which induce the over anxious millmen to make concession in prices.

We manufacture hardwoods and only have a small stock of hemlock, but in this section we are not faring badly for prices. Hemlock prices retail are $20 to $24 on a 6 or 7c. freight rate, thus making little if any change in price.—Lynch & Ryan Lumber Co.

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Lack of Liners the Cause of Trouble

Editor Canada Lumberman:— Liverpool, Eng.

To our minds, the reason why specialization in Lower Port wood goods is so difficult can be summed up in one sentence—the lack of regular and reliable liner facilities.—Smith & Tyrer, Limited.

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No Discrimination Against Canadian Wood

Editor Canada Lumberman:— London, Eng.

We are in receipt of your favor asking our views on the letter of Messrs. Charles T. White & Son, Limited, of Sussex, New Brunswick, published in the Canada Lumberman of July 15th.

We have perused Messrs. White's letter (1st June) but, in our opinion, no such discrimination as the company refer to exists, as we doubt if any really large quantity of Canadian lumber is re-exported from the United States to the United Kingdom, although a certain quantity at favorable points for shipment does come to the United Kingdom, but, given equal quality and manufacture and price, there would be no discrimination against Canadian wood or shipments.

With regard to the statement that large quantities of Canadian lumber were shipped from Portland, Boston and New York during the last twelve months, this is perfectly correct, but it has been caused by the difficulty in obtaining shiproom from Canadian ports, tonnage from Canada having been largely monopolized by government requirements for the conveyance of troops, stores, horses, hay, etc., almost entirely shutting out lumber and forcing shippers to avail themselves of getting shiproom wherever it was to be had. Thus, large quantities of lumber were shipped from United States ports which would otherwise have been shipped direct from Canada and New Brunswick to the United Kingdom.

The war has upset all ordinary trading. As you are probably aware, the United Kingdom has drawn the bulk of her wood supplies from Sweden and Russia. The wood trade from Canada for some years has been gradually decreasing owing to Canada having a larger and a better market at her door, Canada being unable to compete, except in specialties, with Baltic shipments.

Last year, owing to the war, the Russian timber ports being closed, a very considerable advance took place in prices, and, on Germany declaring wood goods contraband, a further advance took place, causing a very large demand for Canadian lumber, which found a ready market in the United Kingdom. Unfortunately, owing to the shortage of tonnage, an enormous rise took place in freights, which has continued to the present time and has forced shippers to secure tonnage wherever obtainable, and this has been the cause of the large shipments from the United States ports named. As regards discrimination, we do not think it has entered into the question to the slightest extent.

We ourselves have received very large shipments from Portland and Boston, which should properly have been shipped at St. John, N. B., and also from the Province of Quebec. You must also bear in mind that there are many parts of Western Canada whence shipments can be made cheaper to the United Kingdom from New York and Boston than from Canadian ports, especially in the winter, the liners from the United States ports offering many more opportunities of shipment than from Canadian ports.

The letter from Mr. A. MacLaurin in your issue of June 1st explains clearly the position of Canadian spruce lumber, as compared with Swedish and Russian lumber with which it competes.—Price & Pierce, Limited.

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A Reflection Upon Canadians

Editor Canada Lumberman:— Liverpool, Eng.

I consider the anomaly of Canadian goods being shipped to—and presumably bought by—Portland, Boston and New York and then re-shipped to the United Kingdom (as apparently the product of the United States) is a circumstance that reflects on the business acumen of the Canadian manufacturer or exporter, as the sale of these goods ought surely to be made direct from Canada to Great Britain. The extra price got by shippers in the United States should go into the Canadian manufacturer's pocket. It is simply a matter of the Canadian employing (or working his business through) a good practical and up-to-date representative in this country to manipulate his goods.—Thos. B. Neale.

* * *

Canadian Hardwoods Favored in England

Editor Canada Lumberman: London, Eng.

We duly received your favor enclosing copy of an article re Canadian woods. Our comments thereon are, that elm, birch, beech, maple and basswood from Canada are much more in favor here than similar woods from the United States. We understand that you do not produce, to any large extent, such woods as walnut, ash, oak, &c. Northern grown lumber always gets the preference over that grown in the Southern States.—Duncan, Ewing and Co.

* * *

The Hardwood Inspector's Task

Editor Canada Lumberman: Thessalon, Ont.

We see in the Canada Lumberman and Wood Worker that much is being said in regard to the marketing and inspection of hardwood lumber in Canada. We wish to do all we can to forward the interests of the hardwood business in Canada. First of all, it is a matter of vital importance that hardwood lumber should be properly manufactured and cared for to produce a class of stock that is desirable and to demand a price that will pay the producer for handling it. Many of the producers in our locality consider the ability to produce hardwood lumber "a gift" and think that anything that has two ends is a hardwood board; but we will say "far from it." You will find that it is a "Study." We base our work on the National Rules and we beg leave of the National Hardwood Lumber Association to quote some of the clauses found in their Rules. One of the first things set forth in this little volume is:

"Lumber should be properly manufactured, of good average widths and lengths, it should have parallel edges and all ragged and bad ends should be trimmed off. It must be of standard thickness when stripping dry,' etc.

When the mill man gets so he can produce this stock according to the above rule he is in no danger of not finding a place for his stuff, at the right price.

Our experience shows us that the stock is being produced in many cases on a cheap, slip-shod plan—it is poorly sawed, half edged and the rot and bark and stub-shots are left on it. Then they want the price for it and complain that everyone who buys their "dope" is a robber and takes advantage of them, while the fact is the consumer has paid for all he got. Then comes the matter of inspection. We will have some neutral inspector measure it for us next time. So they come to us inspectors to diagnose their case and as soon as the inspector is in sight they commence to tell him "This is this," and "that is that," etc., and when he tries to instruct them and show them where they are at, they think he is a second cousin to the man who is getting the stock and he is playing the other fellow's hand for him. Now let us quote N. H. L. A. rules again for a clause or so:

"Lumber must be measured and inspected as the inspector finds it, of full length and width. He shall make no allowances for the purpose of raising the grade. Inspection must be made from the poor side of the piece."

To the inspector all "coons look alike," if he is square and capable of "counting your money." He is however, interested in seeing you get what you ought out of your stock, if you are interested in your own welfare enough to accept the advice, and instruction, he is more than willing to give you. On the other hand he is interested in seeing the party who gets the stock get a class of goods that is made right and shipped as it is ordered. Such business is what the producer is looking for, for the man on the other end will take everything he has to offer, from his box lumber to his export, and pay for whatever he gets. While if you try to work off box lumber for flooring stock (No. 3 com. for No. 1 and 2 com.) it won't go. No. 1 com. will not satisfy a customer who wants firsts and seconds and so on. They not only turn you down, but they condemn the business in general in your locality. On the other hand there are lots of fellows buying lumber to-day who are "sharks." They think: We will put in a claim against that car for a small amount and as they shipped it themselves they can't do anything only cry a little. They have to allow it if we say so.

When the work is executed by an inspector there is a different atmosphere in circulation. They investigate matters before they claim anything and consider the fact that this man was working for them as much as for the mill man. Then comes up the matter of this inspector's honesty and ability.

We have the timber and the facilities for producing a class of hardwood that will attract the markets of the world if we just do our part. Just make it right, sell it right, and use your customers with honesty.—F. C. Hall, Clemens Hall Inspection Company.

* * *

An Opportunity for Cedar Shingles in Europe

Editor Canada Lumberman:— Vancouver, B. C.

From time to time we hear prophecies of the extensive orders for lumber that are to be placed when the rehabilitation of Belgium and Northern France shall have begun. At one time orders were reported as actually placed, so anxious were we to get a high polish on the present dull finish that our business conditions now wear. But the time must be drawing nearer under any circumstances, and it is deserving of some forethought; a faculty that we of the wood-goods business are at last beginning to recognize as valuable.

For years Belgium and Northern France have both imported large quantities of pitch pine from Gulf ports: Mobile, Pensacola, Gulfport, New Orleans and other points. It should be noted, however, that all these imports have been of high grade lumber, the commoner sorts being obtained from the Baltic. It is an open question whether the large demand for lumber in these countries will have much effect on the markets of the Pacific Coast on account of the distance.

But there will arrive a great opportunity for the introduction of red cedar shingles into the European market. The immense amount of building to come in Northern France and Belgium will necessitate more rapid construction than was used in erecting those that have been destroyed. These latter grew up slowly during centuries in a manner that would be impracticable now.

It would be quite possible to run up a large number of stereotyped buildings in a very short time that would answer the purposes of housing the unfortunate inhabitants of these countries. But while despatch is urgent, some attention should certainly be given to artistic effect; the buildings will be permanent and should involve as few details as possible that would remind the people of the miseries they have undergone. It would be practicable to put up innumerable weather-proof, commodious and comfortable dwellings, covered with "patent roofings," that would suggest motor garages or buildings of even more sordid usage, and perpetuate the blight now lying over the fair landscape of Picardy and Brabant. But while it may not be possible to reproduce the old tiled and slate roofing, and the quaint thatches, the use of stained cedar shingles, with their soft, harmonious colorings, will be infinitely more in keeping with the recollection of the by-gone scenery than any other material that lends itself to rapid, economical construction nor would it blister and swelter hideously in the sun as some patent roofings, nor with terrifying rattle, remind the indwellers of Maxim fire at every rainstorm.

For economy in construction to carry its light weight, for beauty of design and coloring, for wear resisting qualities, and ease with which it may be put up and (if damaged) repaired, nothing has been found to equal the cedar shingle, since the day that Archimedes, illuminated by his sudden discovery, started from his bath and traversed the streets, crying aloud the name of the 5 to 2 eighteen inch: "Eureka."—Frank Foster, Mainland Lumber & Shingle Company.

* * *

Wholesaler Between Two Fires

Editor Canada Lumberman:

We read carefully the letter published recently in the Canada Lumberman from a United States wholesaler and we agree with a good deal of what he says in regard to the grading of hardwood.

However, we do not believe that the remedy that he suggests is of any use to us in Canada. As large dealers, we would greatly welcome a strict grading system if the buying end could be educated up to use and call for lumber that would be properly graded. However, the manufacturing and sawmill districts of Ontario lie too close together and there is hardly a sawmill

man who does not attempt to sell his lumber direct to the manufacturer, and, as wholesalers, we can say that we are between two fires.

We are asked to supply a better grade than the same gentlemen will take from the sawmill man himself, and it is, as a rule, a struggle to get from the sawmill man a grade that we know our customer will demand from us.

On the other hand, our Canadian hardwood in the vast majority of cases is not of the quality that will stand for being rigidly inspected, not carrying the percentage of firsts and seconds that it should. As regards official inspection, we do not think that the selling end always gets a proper inspection from the Association. As it is usually the buyer who demands the inspection, the tendency seems to be to do the best they can to make it worth their while to insist upon it.

We have had firsts and seconds hardwood condemned and severely culled, owing to what the inspectors called "stained" by being left too long in the log, although the inspection was made in July, having already been cut, dried and shipped, and the cutting took place certainly not later than June first.

Thirty years' experience in the lumber business would convince the writer that such a report was wrong, especially as the lumber was shipped clear, instead of carrying its percentage of No. 2's.—Canadian Wholesaler.

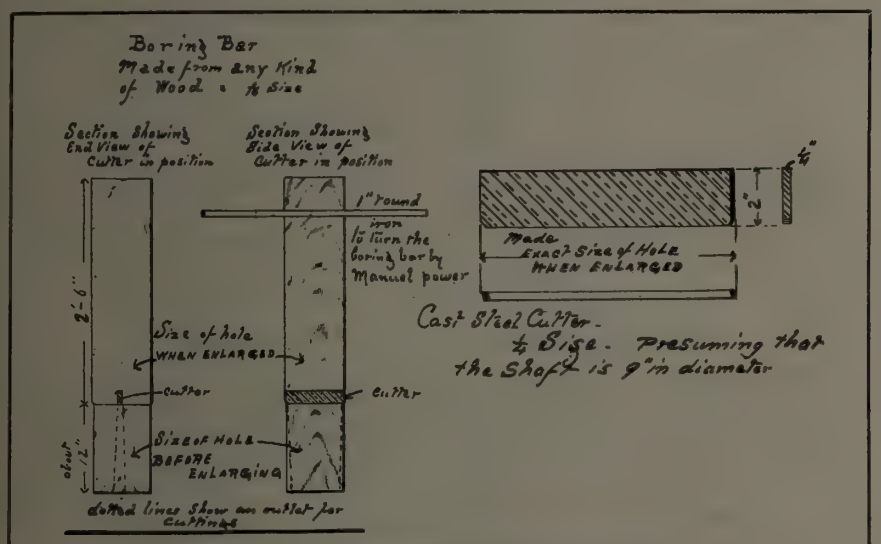
Another Method for Enlarging a Fly Wheel Bore

Editor Canada Lumberman: St. Pacome.

The inquiry from one of your readers regarding enlarging the bore of a fly wheel, has interested me.

I herewith send you a drawing of a boring bar which I have used successfully in similar cases.

This tool can be made from any kind of wood, but if there is no


Boring Bar
Made from any kind of Wood ½ Size
Section Showing End View of Cutter in position
Section Showing Side View of Cutter in position
1" round iron to turn the boring bar by Manual power
Made Exact Size of Hole WHEN ENLARGED
Cast Steel Cutter. ½ Size. Presuming that the Shaft is 9" in diameter
Size of hole WHEN ENLARGED
Cutter
Cutter
SIZE OF HOLE BEFORE ENLARGING
dotted lines show an outlet for Cuttings

Boring bar for enlarging bore of a fly wheel.

lathe on the premises pine would be preferable, as it could be easily rounded to a size by a carpenter.

The small end is made to fit the old bore and will keep the tool in position.

The larger end with the cutter inserted is made the exact size of required bore.

The tool, or cutter, is made to cut at both ends, and can be fed in by a light pressure from the operators.

In your last issue R. Sissons has a drawing very much like the one I send, except that the cutter is regulated by a screw and wedge. The suggestions by "Millwright" in the same issue would, I think, be impracticable. —M. Walsh.

Sir Richard McBride Urges Aid to Shipping

At a recent meeting of the Board of Trade of Victoria, B. C., Sir Richard McBride, Premier of British Columbia, spoke of the opportunities for increasing Canadian trade in Great Britain and on the continent. He had found, during his recent visit to the other side, that where this country had one agent endeavoring to open up fresh avenues of trade, the United States manufacturers and merchants had twenty. For our lumber there could be a large market opened with all the allies as well as with the Motherland, but the only solution of the problem was the securing of enough vessels to handle the trade. Tonnage was exceedingly scarce now, and it was up to British Columbians to bestir themselves to the utmost to see what they could do about it. If we could get the ships we could send to Europe more lumber than ever before. Said the Premier in continuation:

"I met many railway directors and firms anxious to trade with us in England, and the same in France, but they cannot get the ships to carry the lumber from this side. I thought I could say to the people over there who have so many millions invested here: 'You have a right to give us some little consideration.' It is a most timely theme, and how to arrive at some public opinion that will lead to immediate action is a thing we might well devote our attention to. It is nearly impossible to get ships to meet the demands of the trade that offers. Anything we can do as a community to develop shipbuilding will be a good thing for us and should be undertaken.

"One gentleman whom I met in London, Dr. Chapple, a member of Parliament and a native of New Zealand, told me that if the province would guarantee one million dollars, he and his associates could get up a company to start a line to trade with Australia and the Motherland. I told him, of course, that this was a matter that properly came under the jurisdiction of the national government, and that there might be difficulty in the province doing anything in the matter. But, believe me, unless the national authorities are enabled to do this quickly, we will have to do so ourselves. Such a line would have to compete with the big liners, the Weir line, the Holt line and others, but nevertheless it might be well worth while, even if it cost the people something. If we can work out some way to get ships we will soon get relief."

Mr. J. O. Cameron suggested that Victorians should get to work and build their own ships. They had the timber, they had the yards and the testimony of the Imperial Commission was that they had the men. Tonnage was scarce and freights high, so now was the time to get to work.

Greek Market for Box Shooks

The failure of Patras lumber importers to secure their expected supplies from Austria against the coming current season, which opens August 23, threatens to precipitate a crisis on the market for box shooks in this district. Importers began some months ago to investigate the American lumber market in view of such a contingency, but they do not appear to have placed many orders on that market up to the end of May. They are trying at the eleventh hour to secure supplies from the United States.

The wood used in making box shooks is white spruce, which is fairly tough, does not tend to split when made into light shooks, and is of light specific gravity. Wood for this purpose should not have a specific gravity of more than about 1,000 pounds per cubic metre (35-31 cubic feet).

Imports heretofore have been largely in beams, owing to a more favorable import duty on this form of lumber. The popular dimensions on this market are: Length, 9 to 18 feet, squared from 12 by 12 inches up to 24 by 24 inches. Other imports have been in boards. Popular dimensions for boards are: Length, 12 to 18 feet; width, 8 to 12 inches; thickness, one-half to five-eighths inches net when dressed.

No box shooks have in the past been imported to this market, owing to unfavorable import duty on this form of lumber. According to the Greek tariff of July, 1914, imports of wood are subject to duty as follows: Spruce boards up to 20 millimetres in thickness, $4.48 per cubic metre (about 1,000 pounds); boards over 20 millimetres, $3.78 per cubic metre; spruce boards, $2.80 per cubic metre; box shooks, $6.10 per 1,000 pounds.

It appears, therefore, that the duty on shooks is about twice that on beams. In spite of this handicap, it is possible that American shooks might under the circumstances find a market here.

The cases used in the exportation of currants are of three sizes, measurements being outside and in inches, a uniform variation of one-half inch in any dimension being allowed. The figures are:—

Sizes	Length	Width	Depth	Contents Pounds
Cases	31½	12½	12	150
½ cases	22½	11½	11	75
¼ cases	19½	11	9	50

The shooks as prepared here are dressed both faces. The ends of the cases are always set in. Annual consumption is approximately: Cases, 100,000; half cases, 300,000; quarter cases, 2,200,000.

American firms might telegraph their terms direct to this consulate, quoting beams per cubic metre (35.31 cubic feet), half-inch boards per cubic metre, and shooks per thousand cases, indicating size of case. Quotations should state whether terms are f.o.b. New York or c.i.f. Patras. Terms of payment may be arranged to suit sellers. Importers prefer to have terms quoted c.i.f. Patras, as it is difficult for them to secure freight arrangements from New York.—(United States. Commerce Reports).

R. E. Mansfield, United States Consul General at Vancouver, B. C., reports that exports to the United States from Vancouver during the first six months of 1915 exceeded in value those for the corresponding period of 1914 by $1,703,779, the totals being $4,077,292 and $2,373,513 respectively. The greatest increase took place in wood products, ore, and bullion. Exports of wood products for the first six months of 1915 were valued at $1,507,745, and for the first six months of 1914 $985,580, the increase being $622,165.

Edward Hines Calling for Import Duty

Makes Vigorous Argument Before Federal Trade Commissioner—Claims Canadian Lumber Has Many Advantages in U. S. Markets

Great interest is being taken by lumbermen of the United States in the sessions of the Federal Trade Commission. Recently, at Chicago, the lumber interests were given a hearing, and many of the most prominent lumbermen of the country gave expression to their views regarding the state of the industry and the trade. From a Canadian point of view the principal interest was in the evidence presented by Mr. Edward Hines, of Chicago, who devoted much of his time to a discussion of Canadian competition. Mr. Hines said in part:—The lumber industry is in a peculiarly unhealthy condition at the present time. The depression following the year 1912 caused a great falling off in the price of lumber, and inflicting, we think, a greater hardship on lumber than any other commodity, much greater than in comparison befell anything that comes in competition with it; this particularly coming about, in our judgment, from the fact that there are 48,000 sawmills in the country, not alone competing one with the other, but different species of wood of the country being active competitors for the same trade, particularly in the great consuming states and cities of the United States; in the Central Mississippi Valley, taking for instance from central Wisconsin and Minnesota to the Ohio River, from Pittsburgh to Denver, the territory that uses the largest proportion of lumber of any like territory in the United States. Yellow pine from the South is an active competitor for this business. The Pacific Coast States—Washington, Idaho and Oregon—are strong competitors for this same trade. Canada is a great competitor, and with peculiarly strong advantages over all competitors in the West, Northwest and South, in the great consuming market of the Great Lakes.

Canadian Advantages in the Lake Markets

We desire to call your special attention to the peculiarly special advantages that Canada has over practically any of the manufacturers located in the United States, in reaching the greatest, not alone consuming, but manufacturing cities in the United States like Milwaukee, Chicago, Bay City, Detroit, Toledo, and many of the smaller cities on the Great Lakes; and through these gateways to the greatest consuming States of the United States, like Illinois, Indiana, Ohio, Pennsylvania and New York State. Canada has a great advantage particularly in the transportation of its products in a very low water rate of freight, cheap labor, and cheap farm produce, and comparatively no taxes. Thus, lumber coming by water from Canada to the great gateways above mentioned, largely manufactured on Georgian Bay, an arm of the Great Lakes, is directly accessible by cheap water transportation; the average cost of transporting Canadian lumber by water, to the respective cities above mentioned, is about $2 per thousand feet. The average cost of transporting by railroad the same character of lumber from Minnesota to Wisconsin, which today are the closest markets in this territory, is 22 to 26 cents per hundred pounds, or $5.50 to $6 per thousand or about 200 per cent. greater than from Canada. From the great Southern States, which are the largest producing districts of lumber in the United States, like Alabama, Louisiana, Mississippi, etc., the rate to Chicago is approximately 25 cents; to Buffalo approximately 32 cents, or, say, an average to this particular territory of 26 cents per hundred pounds—taking yellow pine averaging 3,000 pounds, the freight would amount to $8.50, as compared with $2 from Canada, or 300 per cent. greater from the South than from Canada. And this is not all. Take lumber coming from the Inland Empire, the rate to Chicago being 42 cents; to Buffalo 55 cents, or, say, an average of 50 cents, the lumber rough would be $12.50 per thousand feet or 500 per cent. greater in freight than from Canada, on identically the same character of lumber. Further, lumber coming from either Wiconsin and Minnesota, south, or the west, on which the freight averages from 200 to 500 per cent. more; is paid directly to American railroads, of which a very large proportion goes to American labor, and directly to the consumer, as compared with lumber coming from Canada by water transportation. Note the great advantage the Canadian operator has in transportation alone; the unique and favorable position he occupies, being on the very border of the great consuming markets of the United States, as compared with the South, 1,000 miles from such a market; Wisconsin, an average of 500 miles; the Inland Empire about 2,000 miles, and the Pacific Coast about 2,500 miles. In addition to this there are large quantities of lumber produced in the Rocky Mountain region of Canada, and in British Columbia under conditions which enable them to ship the product to the United States on a much more favorable basis.

This is not all the advantage she has over the American manufacturer; first, labor is generally from 10 to 15 per cent. cheaper than in the American mills; second, she has a great advantage in mode of taxation, in most of the cities the local districts vote to the manufacturer or industry an absolutely free personal property tax as compared with the large taxes paid by the American manufacturer. Third, the Canadian operator does not have to invest large amounts of money in advance, in the way of purchasing standing timber to insure his mill output; the government owns the timber, and leases, so to speak, a tract or district to the manufacturer, whereby he is only obliged to pay for the timber as he cuts it, and pays no interest. Compare this with the American manufacturer who is obliged to buy his timber fifteen to twenty years in advance of his cutting it, interest and tax charges starting immediately, also subject to risks of fire, timber blowing down, etc., while the Canadian operator is not subject to these risks, as the timber belongs to the government and any loss is a government loss. Also the cost of farm products is generally less in Canada than in the United States, the Canadian operator paying less for his horses, food-stuffs, etc. Fourth, the standard of living in Canada, of the Canadian woodsmen and laborer, is not to be compared with that of the American, enabling him to live and work for less.

Therefore, it is apparent that the present low price of low grade lumber in the United States, which is a tremendous factor in the aggregate, is largely influenced by the large importations of low-grade lumber from Canada. The Canadian manufacturer is anxious to log, saw and ship his low-grade product, and can do so on account of their cheap labor, cheap farm supplies, and the still greater advantage that they have in certain parts of Canada, by cheap water transportation to our largest and best markets. This permits the Canadian manufacturer to utilize almost every tree in its entirety and to net him something even on the cheapest kinds of stumpage and most defective material, as against compelling the American manufacturer to leave in the woods a large proportion of coarse timber, semi-defective material, in order that the average price of that which he does utilize will warrant his expense of logging, manufacturing and shipping.

Low Lumber Prices Cause Forest Wastage

Not alone is the price of low grade lumber in this country depressed, but there is directly lost to posterity in this country, the very large quantities of timber that is now being left in our American forests, as whatever is left must go to waste. If, for no other reason but in the interests of that which affects us all, "conservation" should not this commission propose something that would remedy this awful and deplorable condition of waste?

On the importations from Canada on basis of about 1,000,000,000 feet per year on a conservative figure, the American railroads lose from $5,000,000 to $7,000,000 in loss of revenue as compared, if this same quantity of lumber would come from the various manufacturing points in this country, and what is lost to the railroads of this country, must necessarily mean a national loss. Since the lumber industry occupies such a high place in this country, ranking first in the number of employees, in consumption of farm products, in the use of manufactured goods, and in the amount of freight furnished the railroad companies, anything which will depress it, must quickly be followed by depression in all associated lines of business, in the commercial and industrial activity of the entire nation.

It would seem, therefore, that the American people, through a body like the Federal Trade Commission, after carefully considering the condition of this great industry at the present time, would be warranted in recommending to the Congress of the United States, that an adequate import duty, which, as shown from the past, could properly be classed as a revenue duty, be put upon the statute books of this country, as a part protection to not alone this industry directly, but to labor in general, and the many diversified interests that depend for their livelihood on this industry.

Tax Our Lumber While Enjoying Our Free Markets

The condition at the present time is, by having removed the tariff on lumber, the markets of our 100,000,000 people of the United States, are thrown open for the benefit of the 10,000,000 people in Canada, inflicting a useless loss upon this industry, the American people, and to the United States Government. And Canada offers absolutely nothing in return in the way of reciprocal relations. This is most particularly illustrated in her duty on lumber imported from the United States, when dressed, of 32½ per cent., and if rough 7½ per cent. And in the past there have been some kinds of lumber exported from the United States to Canada, such as various kinds of hardwood, maple flooring, and large quantities of lumber from the Inland Empire, and yellow pine from the South to some extent. But

this is not all; it is particularly illustrated in her law absolutely prohibiting the exporting of any timber or logs to be manufactured by mills in this country, compelling the Canadian timber to be manufactured only in Canada, thus furnishing employment to her own citizens, and furnishing a market for her own farmers, as against the loss to the American laborer, and the American farmer. She will not even allow a single piece of machinery of any kind to come in from this country for the construction or operation of her sawmills, except on the payment of a heavy protective duty, which is almost prohibitive. While, under the present free entry from Canada into the United States, every foot of lumber coming from Canada to the United States, deprives this country of its former revenue, the American railroads of its cost of transporting same, as compared with being manufactured here; the American laborer of his just proportion of what he would obtain if the lumber were manufactured here; the American farmer of his just proportion in the sale of foodstuffs and supplies, if the stock were manufactured in this country; the American manufacturer of various lines of machinery, oils, belting, and other accessories if the lumber were manufactured in American sawmills, as compared with Canada, the general loss to this country of fully 80 per cent. of the cost price of that lumber. Taking for instance lumber averaging $15 per thousand, fully $12 per thousand is lost to the American nation, as fully that proportion of the cost of lumber if manufactured in this country would be paid out directly and indirectly to American labor and producers.

It has been perfectly plain to anyone watching the lumber business during a twelve years' period, when the latter enjoyed a duty, even though very small, that the lumber trade enjoyed the greatest degree of prosperity, not alone the manufacturer, but the American laborer, mechanic, farmer, and railroads of this country; while on the contrary, since the duty has been taken off this industry has become almost paralyzed, and many concerns bankrupt.

Our Handicapping Marine Laws

Because of the navigation laws of the United States, the American lumber manufacturer is compelled to ship lumber from one American port to another in an American boat, flying the American flag, built by American labor, and manned by American seamen, living under American conditions, while the Canadian manufacturer is at liberty to ship from Canadian ports on either the Atlantic or Pacific, to any American port, in any character of foreign bottom. This represents conservatively an advantage of $2 per thousand feet on shipments from Pacific ports in Canada to Atlantic ports in the United States, through the canal or otherwise. When normal conditions are restored in Canada following the present European war, the Canadian lumber manufacturers can and will undoubtedly take advantage of this situation, in competing for the big markets on the American Atlantic seaboard to the detriment of the manufacturers on the American Pacific Coast.

The entire lumber manufacturing industry of the United States, represented by the National Lumber Manufacturers' Association, has full confidence in the honesty of purpose of your body, and feel that only by full knowledge of conditions in our business can we receive the assistance that this great industry is entitled to. Therefore, after you have full opportunity of considering the briefs we have submitted, if there is any further information desired, we would feel it a pleasure and our first duty to furnish same promptly.

Newfoundland Industry Benefited by Permission to Export

The recent passage of a law permitting the exportation of unsawn or unmanufactured lumber from Newfoundland and permitting other privileges to lumbermen is reported as having been a great benefit to the industry. Coming just when the universal want of lumber is being felt throughout the world, because of the cutting off of much of the supply from countries now engaged in the war, both Canadian and United States capital has been attracted into the new field by the possibilities of large profits. Under the old law it was impossible to develop the lumber business of the big island or of Labrador, and millions of feet of prime timber was allowed to remain in the forests until it either fell or was destroyed by fire. This law has been suspended for two years in Newfoundland and for ten years in Labrador, but it is confidently predicted that the development of the new industry will be so profitable that a further suspension will be voted by the Government and that the old conditions will never again be permitted.

Within the last few months thousands of square miles of stumpage have been contracted for and arrangements made for developing a big export business. The English commission that recently made an investigation of the timber found that about 95 per cent. of the forests is spruce whose tensile strength and toughness of fibre are "unsurpassed." British buyers are contracting for pit props and other colliery and building lumber as well as pulpwood. A dozen large cargoes already have been shipped to England and France, and it is estimated that about 6,000 men are now engaged in the woods getting out timber. The new legislation will facilitate the efforts of United States interests to secure sites and rights for the erection of pulp and paper mills as, among other things, the entrance duty free is permitted of all the apparatus and machinery required in such plants. The only mill now operating in the colony for pulp and paper manufacture is that of Lord Harmsworth at Grand Falls, which is now operating at full capacity. Indications are that Newfoundland will now begin to take an important place in the lumber business of the world, as it is nearer Europe than any port of the United States or Canada; it has open ports the year round and labor is abundant and cheap. Timber cruisers report that the forests average so thick in Newfoundland that it will take forty years, cutting at the rate of 250,000 cords of pulpwood a year, to take out one generation of trees, while the vigorous growth will have in this time more than replaced what had been taken out.

Farmers and Lumber Company in a Feud

That certain farmers of Tichborne Township in Frontenac County, Ontario, where in June last, the great Third Mile Lake Dam of the Napanee River Improvement Company was blown up, are in a closely-knit league to stop the damming of the chain lakes in the Township, was revealed by the investigation conducted there on Thursday by Superintendent Joseph Rogers of the Provincial Police, and R. H. Greer, representing the Attorney-General's Department. The investigation reveals a story of more than usual interest. Many years ago, when the grants of lands were made to the settlers, reservation was made allowing a logging company to flood the lots to carry down logs. This arrangement, as a rule, meant that after the Spring drive of logs, the water was allowed out of the dams, and the farmers were able to cut hay in the Summer on the low lands. The logging company, however, assigned its rights to a river improvement company that used the dams to run mills. Instead of letting the water off the flooded lands in the Spring the water was held all year round, shutting the settlers out completely. This gave rise to friction between the company and the farmers that was aggravated year after year. The farmers tried by various means to have their grievance remedied, but although an agreement looked probable at one time, it fell through. Then one after another dams were blown up, the last on June 28 last, leaving the company only one dam out of five in operation. An investigation was opened. It is doubtful if an arrest will be made, but enough evidence and information has been secured to make it impossible for another outrage to take place without leaving the perpetrators facing prosecution and the penitentiary.

A Stiff Task for the Waterways Commission

Pulp and paper interests are vitally concerned in the question of the levels of the Lake of the Woods and its tributary streams, which is to come before the International Joint Commission in September. The commission has announced a series of meetings, to be held at Warroad, Minn., at International Falls, Minn., and finally at Kenora, Ont. The Minnesota and Ontario Power Company, at International Falls, one of the largest paper mills in the United States, is one of the interests concerned in the question of levels. Vast quantities of timber are brought down the tributary streams to mills on Rainy River and the north shore of the Lake of the Woods, while many million dollars have been invested in power development on Rainy River, at the outlet of the Lake of the Woods and on the Winnipeg River. Some of these interests would prefer low levels and others wish the water high, and the problem for the commission is to recommend to the Canadian and United States governments the establishment of levels in the Lake of the Woods which will satisfy all concerned on both sides of the boundary, transportation, agricultural and fishing, as well as lumber and paper interests.

Death of R. M. Appleby

The lumber trade in Ontario was greatly shocked to learn recently of the death by drowning of Mr. R. M. Appleby, of Parry Sound, Ont., and his son Merland, age 9 years. Mr. Appleby and his two sons left their mill at Boakview to go to Partridge Lake for a fishing trip. They were joined on Saturday night by a couple of employees from the mill. On July 25th Mr. Appleby and his two sons went out in the lake, anchored their canoe and began fishing. One of the boys leaned over the side too far, causing the canoe to roll and Mr. Appleby, in trying to right it, turned it over. The elder boy stuck to the canoe and Mr. Appleby tried to save the younger, but became entangled in the anchor rope and fish line. The elder boy, who is twelve years of age, swam ashore, but it was many hours before grappling hooks could be secured and the bodies recovered. Mr. Appleby's body was found entangled in the lines and the boy was clasped in his arms. The late Mr. Appleby was 44 years of age and went to Parry Sound from Barrie a number of years ago. He leaves a wife and three boys and four girls.

Wholesale Lumber Prices in 1914

Review of Market Fluctuations as Reported to the Department of Labor—A Year of Exceptional Condition

In a review of wholesale prices in Canada during 1914, issued by the Department of Labour, Mr. R. H. Coats, Editor of the Labour Gazette, writes in part as follows:—

At the beginning of the year the trade depression in lumber appeared to be passing away. Activity was anticipated in the lumber markets as stocks were scarce and a demand was expected. The situation was still more encouraging in nearly all parts of the country at the end of July, when the war broke out, and prices were becoming firmer in some lines. In British Columbia, where the depression in the lumber trade was greatest, it seemed that improvement was about to set in. The promise of good crops in all parts of Canada was an encouraging feature. The drouth, which greatly curtailed the crop in the Prairie Provinces, had diminished these expectations very little when war broke out. The new conditions caused a great demand for lumber in the Maritime Provinces and some demand in the other Eastern Provinces, but the shortage of ships and difficulties in shipping prevented this demand from having its full effect. In British Columbia the improvement in general trade was no longer expected, but the high prices of grain in the Prairie Provinces improved the demand in that district somewhat. Owing to the conditions during the year the production was kept down considerably and stocks were not allowed to accumulate. In the Eastern Provinces the production was estimated to be up to the average or even to have exceeded it owing to the admirable demand from Britain in the latter part of the year. At the end of the year, throughout the country, stocks were low, especially supplies in consumers' hands, so that any improvement in trade would immediately cause renewed activity.

Relative Prices of Lumber, 1910-1914

Commodities included: Pine, all grades, good sidings, shipping culls, box boards, No. 1 cuts; N. B. Spruce and Shingles; Lath, Hemlock, Oak, Birch, Maple (soft), B. C. Fir and Shingles.

(Prices 1890-1899 = 100)

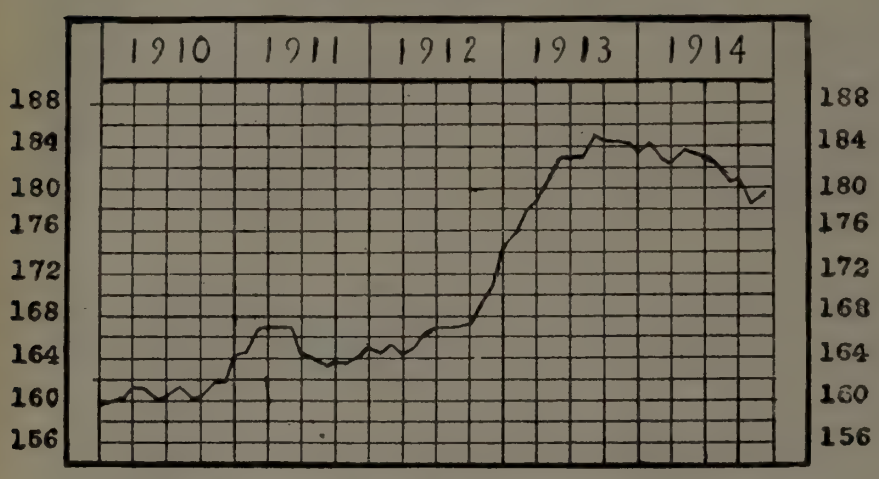


Diagram illustrating course of lumber prices during past five years.

The Maritime Provinces.—The year in New Brunswick was reported to be very profitable for those mills having plenty of logs. However, owing to prolonged strikes in the summer of 1913 in the mills at St. John, to high wages and other causes, the cut of logs in the winter 1913-14 was curtailed. Therefore, during the season of 1914 only about 55,000,000 logs passed through the booms at St. John instead of 100,000,000 logs. English deals were in strong demand and mills contracted for their cut at $17.50 early in the season. The increased demand in the latter part of the year raised the price to $20.00 for new supplies available. Stocks were therefore very light at the end of the year. Great difficulty was experienced in getting ships as many were taken over by the British Government for use in European waters. Owing to the light demand in United States markets, boards and laths in New Brunswick slumped in price. Shingles also were in little demand and at the end of the year stocks were heavy except at St. John. The local demand for lumber was only fair, but was slightly stronger in the latter part of the year. In Nova Scotia the output was somewhat larger than expected and conditions were considered promising at the end of the year.

Quebec and Eastern Ontario.—There was a considerable decrease in exports to Great Britain, chiefly owing to the high freights and scarcity of vessels in the latter part of the year, although the demand was very strong. In Montreal a great falling off in building was reported, especially in large structures, and shipments to Great Britain were also light as stocks were large. Buying by local dealers was hand to mouth.

In the Ottawa Valley the cut showed a decrease of 80,000,000 feet. Tight money and financial stringency, the light fall of snow in the winter 1913-14, a dry spring, and low water during the summer contributed to this result. The breaking of a dam at Ottawa in the spring, and the burning down of one large mill later in the season, reduced the cut of this mill from 75,000,000 feet to 37,000,000 feet. The demand was light for local trade throughout the year. A strong demand from Europe developed in the autumn, but owing to high freights, greater cost of insurance and scarcity of boats, full advantage could not be taken of it. As the cut had been light and retail stocks were low during the year, prices were maintained except in the higher grades, which declined considerably, and the middle grades declined slightly. The demand for shingles and lath was fairly good in 1914, but less than in 1913.

Northern and Western Ontario.—Trade was quiet in the early part of the year but some improvement was reported in the spring, and stocks were reported lighter than in the previous year. Financial stringency, lack of building activity and unfavorable weather caused a quiet season. Later in the summer the demand in cities was very quiet as building operations were light, but in country districts demand was somewhat better, although only hand to mouth. Factory demands were very light, but as stocks were not heavy, prices were maintained.

The Prairie Provinces.—The decrease in the lumber trade was not so great as expected; the financial stringency was the great factor in the early part of the year and the war caused still greater depression in the latter part. Municipalities curtailed their expenditures greatly. In country districts it was stated that even those farmers who had good returns from their crops owing to high prices were careful in making expenditures as the light crop had led to caution.

British Columbia.—The financial depression and quiet trade had greatly reduced the trade in British Columbia lumber. The speculation in real estate and the great building activity in Western Canada had come to an end. When the Prairie Provinces ceased buying, lumber mills in mountain sections in British Columbia were deprived of their most important market, prices became purely nominal and generally weak. The war cut off the export trade as there were no vessels for shipment. Toward the end of the year a slight improvement was noted. Considerable demand for railway ties, bridge timber and building material from the European Governments had set in and was expected to increase. An outlet for British Columbia lumber in Australia, Japan, China and India was also expected. The cut for the year showed a considerable reduction and shipments and imports were also smaller.

Review by Kinds of Lumber

Pine.—The higher grades of pine showed considerable decline. The middle grades were also down, but the lower grades were steady and in some cases firm. No. 1 cuts at Toronto fell from $55-$57 per thousand to $50-$52. Good sidings fell at Ottawa from $53-$55 to $52-$54. Shipping culls declined from $30-$35 to $28-$30. Box boards rose from $16-$18 to $17-$18 in March and in May to $18-$19. In September, however, the price fell to $17.50-$18. Mill culls were firm in the autumn. The average value of the cut of a large firm in the Ottawa Valley for the 1914 season was estimated at $20.25 as compared with $20.75 in 1913, and $20.50 in 1912.

Spruce.—New Brunswick spruce deals rose from $15.50 to $16 early in the year, but fell off to $15 by August 1. In October the price rose to $15.75 and in December to $17.25. At Ottawa, spruce was $17-$18, the same prices as in 1913.

Hardwood showed some decline in prices. Red oak was down from $62.50 per thousand to $59 per thousand. Birch declined from $33 to $30. Soft maple fell from $28 to $25. Elm and ash were also $1 to $2 lower. The demand was quiet.

Shingles.—New Brunswick cedar shingles rose from $2.90-$3.25 to $3.00-$3.35 in April but declined in May to $2.75-$3.20 and in October to $2.60-$3.20. British Columbia shingles were steady in price till the end of the year, when prices were generally weak.

Hemlock.—Prices were steady. The market was somewhat firm early in the year as stocks were not large. Building activity, however, did not increase and prices became weak.

Lath.—Prices firmed up at Ottawa in the spring and were steady in New Brunswick. The market fell off toward the end of the year.

New Brunswick Stampage Receipts Increasing

August 5th was the last day for the holders of crown timber land leases in New Brunswick to pay their stumpage, and as a result the Lands and Mines Department received about $400,000. Contrary to the expectations of some months ago, the lumber cut on the crown lands of New Brunswick during the past season, and upon which the province receives stumpage, was greater than the previous year. The cut on which stumpage is paid this year amounts to about 285,000,000 superficial feet, upwards of five per cent. more than in 1914, when the quantities cut on the crown lands amounted to about 270,000,000 and the amount of stumpage collected was $385,624, as compared with $305,718 the previous year.

War on Substitutes

Address before the Winnipeg Retail Lumber Dealers, Manufacturers, Builders and Architects by R. J. Chamberlain, of the Forest Branch of the B.C. Government

The camp of the Winnipeg retail lumber dealers has been stirred into activity by an address which Mr. R. J. Chamberlain, of the Forest Branch of the British Columbia Government, delivered on July 14. He set forth in pertinent language the serious inroads which substitutes for lumber, in many cases of inferior quality, had made into the lumber trade of Canada, almost entirely owing to the fact that these substitutes, to secure attention of the public, had to enter and did enter upon an aggressive advertising campaign, and meanwhile the lumbermen and dealers, relying on the belief that the public could not be swayed from the use of lumber, did not at the same time start as an aggressive campaign to maintain the knowledge of lumber amongst the consuming public which that very important factor of our Canadian resources is entitled to.

The lumber manufacturers of British Columbia, through the Forest Department of the British Columbia Government, are now launched upon an aggressive and comprehensive campaign to fully acquaint the retail lumber dealers through the consumers of the Dominion with the advantages over substitutes which our natural Canadian woods hold.

The British Columbia Government has decided to spend at least $25,000 for the extension of the lumber business in Western Canada.

Mr. R. J. Chamberlain, Forestry Branch B. C. Government.

This is in conjunction with an expenditure of approximately $50,000 which the same Government had allocated for the development of the export lumber trade from British Columbia to all parts of the world.

The present policy of developing the lumber trade which the British Columbia Government has adopted, embodies the publication of separate bulletins compiled by the Forest Branch, with the co-operation of the Provincial Agricultural authorities in the three provinces. These pamphlets will contain figures demonstrating the saving which farmers can make by the erection, for instance, of wooden implement sheds. Some of these pamphlets will contain the latest design in barns, the plans for which are being prepared by experts and which are recognized by the Provincial Government authorities. One of these pamphlets, for instance, will demonstrate that a wooden piggery is even better for the hog raiser than the concrete one. A Government official has already gone on record to state that the concrete hog house was extremely detrimental to the economical production of pork, emphasizing the feature that wooden walls and wooden floors were essential to the raising of any live stock.

During the course of his address Mr. Chamberlain laid stress on the fact that apparently through the activities of substitutes for lumber, concrete, asbestos, shingles, and many other so-called fireproof materials, were actually considered by fire insurance companies as superior fire risks, whereas figures actually compiled showed that in Milwaukee for the year 1913 (the latest statistics available), the fires amongst wooden buildings were 1½ per cent. as against fires in brick buildings being 5 per cent. Such striking statements as these, and the recent conflagration of the Edison plant, which was entirely of concrete construction, and generally supposed to be absolutely fireproof, made Edison, having recognized the intrinsic value of lumber as a building material, rebuild his plant largely of mill construction.

The Forest Department of the British Columbia Government is compiling, and will shortly place in the hands of the lumber dealers and consumers, indisputable arguments in pamphlet form, showing the advantages of lumber in building.

Alien Enemy's Suit Discussed

Because Great Britain is at war with Austria-Hungary and because Mrs. Anna Lucyzcki is a subject of that empire, her action against the Spanish River Pulp and Paper Mills, Limited, to recover $5,000 damages for the death of her husband, Lwan Lucyzcki, who was killed in the mills of the company at Espanola, Ont., in June, 1912, was this week dismissed. In dismissing the action, however, G. S. Holmstead, acting Master in Chambers, said that he did so without prejudice to another suit which might be brought at the conclusion of the war.

Canada's Trade in Forest Product

During the twelve months ending June 1915, Canada's trade in forest products was valued at $43,288,935. During the corresponding periods in the two previous years the values were as follows:—1914, $43,241,666; 1913, 43,518,571. For the three months ending June the values were as follows:—1915, $10,320,695; 1914, $9,682,443; 1913, $9,232,914. For the month of June the values were as follows:—1915, $4,904,152; 1914, $4,511,249; 1913, $4,323,636.

The western Pine Manufacturers' Association in its report of shipments during May 1915, shows that only 12 cars with 286,591 feet of lumber were shipped to Canada, as compared with 113 cars containing 2,556,232 feet feet during May 1914. The total shipments to all markets were 83,822,683 feet in May 1915, and 81,044,218 feet in May 1914.

Personal and Impersonal

Finlay, Durham & Brodie, Victoria, B. C., agents for the Royal Mail steamers, report the hope for an early resumption of the line.

J. William Jones, of Robert Jones & Co., Liverpool, Eng., spent some time recently in Victoria, B. C., in connection with the shipment of spruce boxes to Liverpool.

C. C. Yount, a stockholder and former manager of Empire Lumber Co., Cowichan Lake, B. C., has resigned his position. He has been succeeded by Manager McDevitt.

The Mankin Lumber & Coal Company and the Churchill Lumber Company at Hall and Porto Rico, B. C., report that they are making larger shipments to the United States than at any previous time.

The marriage of Mr. James Buchanan, of the Graddon Lumber Company, Montreal, and Miss Elizabeth Willis was celebrated at the family residence, Oliver Avenue, Westmount, recently. The ceremony was performed by the Rev. J. J. Willis in the presence of the immediate relatives.

Robert Booth, Pembroke, Ont., a widely known lumberman, died recently at his home after a long illness. The late Mr. Booth had resided in Pembroke since 1885. He was a director of several important companies and a very active and successful business man. He was a cousin of Mr. J. R. Booth, of Ottawa.

Col. A. D. McRae, widely known to the lumber trade of Canada as the former managing director of the Canadian Western Lumber Company, Fraser Mills, B. C., has been placed in charge of the work of the Canadian Army Service Corps. He will take over and consolidate the units which have formerly been looking after the Canadian battalions in England with the assistance of British experts. Col. McRae will be supreme purchasing agent in Great Britain for supplies. He commenced his new duties by making a tour of British establishments, accompanied by Captain Hogarth, of Toronto, who had joined his staff.

The National Forests of the United States turned into the United States Treasury during the fiscal year ended June 30, 1915, nearly $2,500,000, an increase of more than $40,000 over the receipts of the previous year, according to a statement just issued by the Forest Service. The timber sales, which amounted to $1,164,000, yielded on account of the depressed condition of the lumber industry about $79,000 less than those of the previous fiscal year, but the gain was made possible by larger revenues from other sources. The grazing receipts, which totalled $1,125,000, increased $127,000 over last year, and the water power receipts, which amounted to not quite $90,000, showed an increase of nearly $42,000.

A Bit of History in Connection with Forest Industries

Victor Thrane, Vice-President James D. Lacey Timber Co., Chicago.

James D. Lacey, President James D. Lacey Timber Co., Chicago.

Wood Beal, Vice-President James D. Lacey Timber Co., Chicago.

The result of knowledge obtained through honest, persistent endeavor has never been more strikingly illustrated than in the creation and sale of a $3,000,000 bond issue by the James D. Lacey Timber Company for the Brown Corporation, of Portland, Maine. The Brown Corporation constitutes one of the component companies of the Berlin Mills Company and the Burgess Sulphite Fibre Company, of Berlin, New Hampshire. These three companies represent an organization founded in 1852 and purchased by William W. Brown in 1868. They have remained in profitable operation ever since and now manufacture news print paper, kraft paper, bleached and unbleached sulphite pulp, building paper, window frames, lumber, soda ash and various other by-products, and today represent an investment of $32,000,000, with annual sales averaging $12,500,000. These correlated companies take annually from the stump 300,000,000 feet, board measure, of which 60,000,000 feet goes into lumber; the balance into the by-products above mentioned. The companies utilize upwards of ninety per cent. of the tree, in comparison with the average sawmill practice of the utilization of 35 per cent. to 40 per cent. of the tree for lumber, the remainder being burned at the mill or left in the woods as refuse or waste.

James D. Lacey Timber Company was incorporated in November, 1914, and through it this bond issue was placed on the market in February, 1915, during a period when the leading bankers of the country were disinclined to consider any kind of new securities. In the construction of this bond issue, the arrangements which the timber company provided for the maker of the bonds to obtain a source of revenue to pay interest and provide a fund to retire the bonds as they matured, were so perfect and the security was so ample, that it was at once obvious to the banker and investor that the bonds were a dependable security.

Between the timber bond and other forms of securities there exists a sharp differentiation, which is great enough to demand knowledge resulting from experience to enable those who handle timber bonds to deal intelligently with the situation. From lack of experience the ordinary banker, broker or bond dealer does not posses this information. As a rule, bond houses are not flexible enough in their methods to enable them to meet all the varying needs of lumbermen and timber owners. In some cases a bond issue is the only practical way of meeting the financial needs of the operator. In other cases the loan desired is too small to justify the expense of putting a bond issue on the market. Many capitalists would prefer to place a large loan in a first class mortgage than to become one of many investors in a large bond issue. Furthermore, many borrowers do not require long term loans, but do require funds for longer periods than the or-

J. W. McCurdy, Secretary James D. Lacey Timber Co., Chicago

W. G. Collins, Assistant Manager James D. Lacey & Co., Portland.

H. D. Langille, Special Partner, James D. Lacey & Co., Portland.

dinary bank is willing to grant. This class of borrowers should gladly avail themselves of facilities that will make marketable amply secured notes maturing in one to five years.

James D. Lacey Timber Company is an extension of the co-partnership of James D. Lacey & Company, the latter house having been established by James D. Lacey thirty-five years ago. Since 1880 Mr. Lacey and his associates have been actively identified with the work of buying, selling, cruising and valuing lumber and timber properties. During this period the members of the Lacey organization have been part owners in and operators of logging and milling properties. The result is an intimate acquaintance with the timber and lumber business from tree to consumer, and within the period mentioned this organization has accumulated information concerning the amount and value of timber in the United States and Canada which cannot be equalled by that possessed by any other individual or corporation in the country. There are few tracts of timber of importance in the southern states, on the Pacific coast, in British Columbia, in eastern Canada, or the Appalachian mountains, a record of which in some form is not contained in the files of James D. Lacey & Company. This does not mean that every tract has been cruised, valued or preliminaried by the skilled employees of the firm, but it does mean that other tracts of the same general character, growing under substantially similar conditions, have been examined and such information is on record in the files of James D. Lacey & Company. These files give detailed information concerning numberless tracts of timber of varying size in all parts of North America where timber is a chief or the only natural resource. Under arrangements perfected between James D. Lacey & Company and the James D. Lacey Timber Company the latter organization has the use of all the experience and records of the former.

James D. Lacey & Company maintain offices in Chicago, Portland, Oregon, and Seattle, Washington, and the main offices of the timber company are at Chicago. Mr. Lacey is at the head of these organizations and is assisted by Wood Beal, who has been associated with him since 1888, by Victor Thrane, who became a member of the firm of James D. Lacey & Company in 1900, and by J. W. McCurdy, who entered the employ of the partnership in 1906. The Portland office is in charge of H. D. Langille, a special partner in the firm of James D. Lacey & Company, and a resident of Portland, Oregon. He has been in charge of the Portland office since 1906. Mr. Langille has spent practically all of his life in intimate relations with the forests of the west. From 1900 to 1905 he was in the service of the government as special field assistant in the Geological Survey, forest inspector in the Department of the Interior, and in charge of the examination of proposed forest reserves under the direction of the Bureau of Forestry. During the winter term of 1904-1905, he took a special course in forestry at Yale Forest School; resigned from the service the latter part of 1905, and became associated with James D. Lacey & Company the following year. During his career he has visited almost every forested district in the western states, acquiring wide personal knowledge of the conditions with which he deals.

W. G. Collins is Mr. Langille's first lieutenant and is assistant manager of the Portland office. Mr. Collins was originally engaged in newspaper work, and in January, 1906, located in Seattle, Washington. He was first employed in the logging camps of the Kerry Mill Company as "whistle boy" and worked his way up to the position of general assistant to the logging foreman. In 1907 Mr. Collins accepted a detail with the Lacey organization, again beginning at the bottom, as camp clerk, compassman and cruiser, and for a period of four years averaged about eleven months out of every twelve in the woods. In the autumn of 1911 he was made assistant manager of the Portland office, and has had particular charge of the estimating and reporting end of the business, directing the crews in the field and giving close attention to the development of a highly efficient timber estimating and valuing organization. Through the desire of the Lacey organization to keep in close touch with the tendencies of modern business, in so far as they bear upon the problems of the lumber industry, they gave Mr. Collins a special course at the Harvard Graduate School of Business Administration, which he completed, with credit to himself, in June of this year.

B. W. Bawden, Manager James D. Lacey & Co., Seattle.

B. W. Bawden represents the organization at its Seattle office. Mr. Bawden has been identified with the lumber industry ever since he completed his high school work at Davenport, Iowa. The day following his graduation he entered the employ of Lindsay & Phelps, and during his connection with them gained a very complete knowledge of the different grades of lumber, freight rates, weights, etc. During this time Lindsay & Phelps turned their attention to timber purchases in the south and on the Pacific coast, and Mr. Bawden accompanied their cruisers in the examination of the timber that had been purchased, both south and west, and gained a practical insight into the outside matters of the firm. He was with Lindsay & Phelps for about fifteen years, and afterwards spent some time with the Cloquet Lumber Company, of Cloquet, Minnesota. From Cloquet he went to Mount Sterling, North Carolina, as general manager of the Pigeon River Lumber Company, then located at that point. In 1907 he was made manager of the Seattle office of the Lacey organization, which he has served since that time.

A careful examination of the situation convinced the organizers of the James D. Lacey Timber Company that the various needs of financial aid, and the demands of capitalists for safe investments, could be correlated by the proper agency. To perform a genuine service an agency acting in this capacity must know the timber and lumber business in all its branches; must have financial strength, and must possess the full confidence of all concerned in every transaction it handles. A recognition of the requirements above noted led to the formation of the James D. Lacey Timber Company for the purpose of dealing in timber, timber bonds and timber investment securities. The company is equipped to serve and its facilities are placed at the command of all lumbermen and timber owners who need and deserve financial aid, and it will act not only as a buyer and seller of securities, but as a clearing house of opportunities in timber investments.

Both the scope and method of operation are built along lines laid down by men of technical and practical information and experience. They meet the needs of the present and future and should appeal strongly to the timber owner, lumber manufacturer, banker and individual investor, all of whom are more or less familiar with the value of timber and timber securities.

The officers of the company are: President, James D. Lacey; Vice-president and Treasurer, Wood Beal; Vice-president, Victor Thrane; Secretary, J. W. McCurdy.

The directors of the company, in addition to those above named, are Frank D. Stout, Lamont Rowlands, of Chicago, and Charles S. Keith, of Kansas City, Missouri. Individually and collectively the members of Mr. Lacey's organization have been and are important factors in the timber and lumber industry of the country.

Frank D. Stout is a retired lumberman and member of the firm whose name was written in the title of that one time greatest of white pine institutions—the Knapp Stout & Company, of Menomonie, Wis.

Charles S. Keith is president of the Central Coal & Coke Company, of Kansas City, Mo., and of the Southern Pine Association.

Lamont Rowlands represents the C. A. Goodyear timber and lumber interests in Wisconsin, California and Washington. He is vice-president and treasurer of the C. A. Goodyear Lumber Company.

If deemed advisable to increase the board of directors, other stockholders in the company, of equal prominence, are available for positions on it.

This new company is exceptionally well equipped to create, buy and sell the standard form of timber bond, modified or adjusted to meet the makers' requirements in normal or abnormal times. The officers of the company are better qualified to judge the circumstances, necessities and opportunities of each borrower than the ordinary bond house can possibly be and also to place a proper valuation on the assets offered as security. The wide acquaintance they enjoy with investors and bankers will enable them to effect a material saving in preparing and marketing bonds or mortgages. There is a pronounced disposition on the part of retail bond houses to buy their securities from creators of bonds who specialize in different lines of business, and timber bonds issued by the James D. Lacey Timber Company will have the logical preference. The company will serve as a wholesaler of bonds and securities. In a somewhat similar manner, the company will seek to handle first mortgages on timber or mill properties. Individual investors will be placed in touch with such opportunities and the capital connections of the company will enable it to handle short time loans advantageously.

A prominent feature of the company's proposed business is somewhat of a departure from established methods. This will be the creation of a variety of timber bonds which will be issued to finance non-operative timber properties. Carefully selected tracts of timber will be purchased and subsidiary companies organized to hold and handle such tracts. This will present an opportunity to small investors to participate in the profits arising from the purchase and sale of such properties; it being the intention to issue to investors cumulative interest bonds in these various subsidiary companies, which bonds will

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Basswood Wanted

No. 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Wanted Hickory Squares

5 ft. 6 in. by 1¾ in. by 1¾ in.
F.o.b. London Port. For price and particulars apply Box 237, Canada Lumberman, Toronto. 16-17

Wanted

Half million feet 3 x 4, 5, 6, 7 and 8, and 4 x 4 6 ft. and longer in jack pine or spruce No. 1 or No. 2. Would have to be shipping dry. Address The Patterson, Tilley Co., Hamilton. 16

Pulpwood Wanted

10,000 cords four-foot peeled pulpwood, also dry mechanical wood pulp and sulphite wood pulp. Quote prices C.I.F. Liverpool, England, and Bordeaux, France. Write Box 233, Canada Lumberman, Toronto. 16-17

For Sale–Lumber

For Sale

Ontario White Cedar Shingles for sale. Address Seymour Hawke, Millar Lake P. O., Ont. 14-17

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
Montreal, Que.
c

For Sale

A few cars strictly 4 x 16 in. White Cedar Shingles.

J. AUSTIN & SONS,
Kinmount, Ont.
14-17

For Sale

Valuable bush, Hardwood; 16 miles from Toronto. Box 222, Canada Lumberman, Toronto. 14-17

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

Cheese box Veneer in car lots.

G. R. JONES,
15-16 Eldorado, Ont.

Lumber for Sale

250 M. feet of 3-in. White Pine, 5th and better.
200 M. feet of 1-in., 1½-in. and 2-in. White Pine. 4th and better.
Will sell cheap for cash and immediate shipment. Apply Box 241, Canada Lumberman, Toronto. 16-16

For Sale

30,000 ft. 1 x 7 and up. M. R. Spruce.
60,000 ft. 1 x 4/5 in. M. R. Spruce.
30,000 ft. 2 x 4 and up, M. R. Spruce.
Lengths and widths separated.
60,000 ft. 1 x 10/12 in. White Pine Mill Cull.
60,000 ft. 1 x 4/5 M. R. White Pine Strips.
40,000 ft. 1 x 4 in., Box and Com. White Pine Strips.
Write for prices as stock must be moved.

The Elgie & Jarvis Lumber Company, Ltd.,
16 18 Toronto Street, Toronto, Ont.

Would Contract

to supply six million feet spruce, jack, red and white pine. Inquiries solicited. Box 236, Canada Lumberman, Toronto. 16

FOR SALE
Norway and Jack Pine—Mill Run

1 x 4/5 x 10/16 ft.	850,000 ft.
1 x 6	410,000 ft.
1 x 8	67,000 ft.
1 x 10	14,000 ft.
2 x 4	158,000 ft.
2 x 6	161,480 ft.
2 x 8	306,222 ft.
2 x 10	144,537 ft.
2 x 12	26,849 ft.
Norway Pine Culls	
1 x 4 and up x 10/16 ft.	1,200,000 ft.

DEVON LUMBER CO.,
5t.f. Ottawa, Ont.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.
Minimum charge 25 cents

Sawyer and setter wishes position September 1. Reason, short cut. Used to fast rigs. Can furnish good references. Box 232, Canada Lumberman, Toronto. 16

Situation as stationary engineer by steady man with 1915 certificate, reference and tools. Have planing and sawmill experience, also with log deck, electric machinery, Corliss and high speed engines. John Bain, 180 Ontario Street, St. Catharines, Ont. Tel. "980 K." 15-16

Highest grade accountant, 20 years' experience in public works and lumber, now chief accountant in Ontario, wants change, Ontario or elsewhere. 40 years old, married. Highest references and securities. Box 210, Canada Lumberman, Toronto. 12-17

Position wanted by an experienced man, capable of taking full charge of manufacturing, selling, shipping and marketing of lumber. Thirty years' experience. Best of references. Box 229, Canada Lumberman, Toronto. 16-17

Wanted: position as buyer and salesman of Doors, Sash and Millwork, by young married man, who thoroughly understands the business and is capable of taking full charge. Box 238, Canada Lumberman, Toronto. 16-16

POSITION WANTED as Manager of lumber and woodworking business. Thoroughly experienced in Lumber, Factory and Office routine. Expert organizer and capable of producing maximum results. 15 years with one large Ontario Company; best credentials. At present engaged. Box 226, Canada Lumberman, Toronto, Ont. 15-16

Wanted–Employees

Advertisements under this heading two cents a word per insertion. Minimum charge 50 cents

Wanted, a first-class experienced engineer and fireman to operate geared engine on railroad logging job near Parry Sound. Good position for right party. Give experience and references. Reply Box 239, Canada Lumberman, 347 Adelaide St. West, Toronto. 16-16

Lumber Salesman Wanted

We want a man calling on the furniture trade to handle our hardwood lumber and veneers in Canada, particularly Ontario, on commission basis. If you are interested give full particulars of your connection. Box 230, Canada Lumberman, 347 Adelaide Street W., Toronto. 16-17

Wanted–Machinery

Wanted

One Standard Gauge Logging Locomotive, with twelve log bunk cars. State make, conditions and best price. Also steam log loader. Care Box 234, Canada Lumberman, Toronto. 16-17

Wanted

Equipment for logging by both rail and sleigh. Material must be in first-class condition.

Also an alligator. Quote promptly cash price with full details; also point and time of shipment. Will be used near Parry Sound on C. N. R. Reply Box 239, Canada Lumberman, 347 Adelaide St. West, Toronto. 16-16

For Sale–Machinery

Generator For Sale

C. G. E. make—203-35 K.W. With Base. Pulley and Rheostat. Never been used. Is absolutely new.

VICTORIA WHEEL WORKS,
13-16 Galt, Ont.

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.
1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3½-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.
These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Miscellaneous

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including:—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Wanted

Mill by contract. Hard or soft wood. Bank and efficiency references. Box 235, Canada Lumberman, Toronto. 16-19

Assignee's Sale of Planing Mill Machinery By Tender

Tenders will be received by the undersigned Assignee of Edward N. Place of the Village of Port Dover, Manufacturer, trading as the Port Dover Planing Mills, until Wednesday, the 1st day of September, 1915, at 2 p.m. for the purchase of the following machinery:
1 MacGregor Gourlay Company Spindle Shaper,
1 Gourlay Pedestal Jointer,
1 MacGregor Gourlay 4 Side Single End Tennor,
1 Cowan & Co. Planer and Matcher,
1 Clark & DeMill Self Feed Rip Saw,
1 Fay & Egan Co. 7-in. Four Side Sticker and Parts,
1 Cowan & Co. Self Feed Band Resaw,
1 24-in Single Surfacer,
1 Cowan & Co. Swing Cut-off Saw,
1 Wood Cutting Turning Lathe,
1 Jackson Cochrane Carriage Cut-off saw,
1 Emory Stand,
1 Scroll Band Saw,
1 Post Borer,
1 Sandpaper Drum,
1 Wood Frame Hand Feed Rip Saw,
1 Elbow Disc Sander and Table, MacGregor & Co. make,
1 MacGregor Gourlay Co. Power Morticer,
1 Glue Stand and Band Saw Set, together with all belting, pulleys and shaftings.

The above machinery is all set up ready for work in the planing mill at Port Dover. A lease can be obtained of the premises by the purchaser. The property may be inspected at the Port Dover Planing Mills in the Village of Port Dover at any time. All tenders to be accompanied with a marked cheque for 10 per cent. of the amount tendered, which will be returned if tender is not accepted, balance to be paid within ten days after acceptance. Highest or any tender not necessarily accepted.

Dated this 12th day of August, 1915.

CHAS. W. BARWELL,
16-16 Assignee, Port Dover.

Tenders for Pulpwood Limit

Tenders will be received by the undersigned up to and including Wednesday, the fifteenth day of September, 1915, for the right to cut pulpwood on a certain area situated north of the Transcontinental Railway, west of Lac Seul and south of English River in the District of Kenora.

Tenderers shall state the amount they are prepared to pay as bonus in addition to the Crown dues of 40c. per cord for spruce, and 20c. per cord for other pulpwoods, or such other rates as may from time to time be fixed by the Lieutenant-Governor in Council, for the right to operate a pulp mill and a paper mill on or near the area referred to.

Such tenderers shall be required to erect a mill or mills on or near the territory, and to manufacture the wood into paper in the Province of Ontario—the paper mill to be erected within such time and in such place as the Lieutenant-Governor in Council shall direct.

Parties making tender will be required to deposit with their tender a marked cheque payable to the Honourable the Treasurer of the Province of Ontario, for ten per cent. of the amount of their tender, to be forfeited in the event of their not entering into an agreement to carry out the conditions, etc.

The highest or any tender not necessarily accepted.

For particulars as to description of territory, capital to be invested, etc., apply to the undersigned.

N.B.—No unauthorized publication of this notice will be paid for.

G. H. FERGUSON,
Minister of Lands, Forests and Mines.
Toronto, June 5th, 1915. 12-17

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Wanted

A second-hand Alligator, propeller driven, must be in good condition. Give full description with price and state where same could be delivered in case of purchase. Box 225, Canada Lumberman, Toronto. 15-18

carry, in addition to the cumulative interest, a profit-sharing certificate or share of stock entitling them to a participation in the profits of each subsidiary company that will be created.

It should be manifest that what the company already has done and is arranging to do could not be accomplished by the ordinary organization. The knowledge, experience and ability of the officers and directors of the company, fortified and supported by the reliable and detailed information in their possession, has made possible this success already obtained and the advent of this corporation will serve to place lumber and timber finances on a much more secure basis.

Western Farmers' Strong Position

George J. Bury, vice-president of the Canadian Pacific Railway, recently returned from a trip over the wheat-growing area in the prairies. In discussing the present business situation in western Canada Mr. Bury made the following remarks: I have just had the opportunity of discussing the commercial and agricultural situation with many western Canada business men. I have neither seen nor heard anything to discourage; I have seen much to hearten and encourage. Never was the western farmer more free of pressing debts than he is to-day. Loan and trust companies have thousands of dollars in their vaults in Winnipeg awaiting investment in farm mortgages, and they can not place it. The western farmer will have more money this fall with which to purchase luxuries than he ever had before. The wholesaler and the retailers will probably find that they have enormously underestimated the purchasing power of the farmer. In 1909 we were filled with enthusiasm over a crop of 144,000,000 bushels of wheat. I think we may look forward to a crop approaching 240,000,000 bushels of wheat, for which a good average price will be obtained. The Canadian Pacific Railway will make its preparation on that basis, and I venture to advise all other interests concerned to keep that figure in view. With such a crop in sight, with a ready sale at good prices in view of hogs which will be ready for slaughter this fall, with the prospect before us of years of good prices for all farm products, how can any westerner feel despondent?

The Dominion Government has completed a $25,000 extension of the government wharf at White Rock, B. C. The wharf is now 1,700 feet in length and capable of berthing vessels of considerable size, the water being 20 feet at low tide.

The Utilization of Waste Woods

The question of an economical use of the enormous quantities of waste woods of various kinds to be found in many places throughout Canada is one of great importance to the Dominion, and especially to those who are engaged in the lumber and woodworking industries. Any information of a practical kind that can be submitted for their consideration will no doubt be of interest. The following extracts are quoted from a letter received by the Department of Trade and Commerce.

Wood distillation is an important commercial problem, especially if the waste wood is hard wood, when acetone can be obtained. The War Office urgently requires large supplies, the present market price being nearly £130 per ton.

There are about half a dozen wood distillation plants at work in England, most of these being of German design and manufacture, but at the present time four complete plants are being built for the English Government.

The products of the destructive distillation of woods are as follows:—

1. Gaseous—Carbonic oxide and carbonic acid.
2. Pyroligneous—Hydrocarbides, methyl alcohol, crotonylic and amylic alcohols, ether, acetone, formaldehyde, methylol, acetic, propionic, butyric and valeric acids, and finally, nitrogenous compounds of an ammoniacal type, amine and pyridine.
3. Tars.—Hydrocarbides (benzenes and paraphines), methylic alcohol and acetic acid, higher fatty acids, momophenols and diphenols, a little pyrogalloll, dimethylic ether and homo-pyrogallol.
4. Residum—Wood charcoal.

Prices of Plant and Distillation Products

The following figures are given in the Times Engineering Supplement:—

Approximate Prices of Complete Plants

For 25 tons per week	£ 4,000
For 10 tons per week	7,000
For 100 tons per week	13,000
For 500 tons per week	40,000

Distillation Products

	Yield per ton	Price
Boiled Tar	15 gals.	7d. per gal.
Wood Oils	4 gals.	10d. per gal.
Charcoal	6 cwt.	40s. per ton.
Wood Naphtha	5 gals.	2s. 9d. per gal.
Acetate of Lime	1¼ cwt.	9c. 6d. per cwt.

The prices represent a total of 50s. per ton of wood.

Operating Expenses Per Ton Wood at 10s.

Twenty-five tons per week, 28s.; 50 tons per week, 26s.; 100 tons per week, 23s.; 500 tons per week, 20s.

25 ton per week plant—	
Approximate yield per ton	50s.
Approximate expenses per ton	28s.
Gross profit	22s.
22s. by 25 tons by 50 weeks	£1,375
20 per cent. charges on £4,000 cost	800
Net profit per year	£575
50 ton per week plant—	
Approximate yield per ton	50s.
Approximate expenses per ton	26s.
Gross profit	24s.
24s. by 50 tons by 50 weeks	£3,000
20 per cent. charges on £7,000 cost	1,400
Net profit per year	£1,600
100 ton per week plant—	
Approximate yield per ton	50s.
Approximate expenses per ton	23s.
Gross profit	27s.
27s. by 100 tons by 50 weeks	£6,750
20 per cent. charges on £13,000 cost	2,600
Net profit per year	£4,150
500 ton per week plant—	
Approximate yield per ton	50s.
Approximate expense per ton	20s.
Gross profit	30s.
30s. by 500 tons by 50 weeks	£37,500
20 per cent. charges on £40,000 cost	8,000
Net profit per year	£29,500

It will doubtless be noted that a good value for wood waste has been allowed—10s. per ton—so that if the wood has no value and this amount be deducted the approximate annual net profit would be materially increased.

A raft of logs owned by the Partington Pulp & Paper Company, St. John, N. B., struck a small island above the Reversible Falls recently and broke up. About 5,000 feet drifted through the falls into the harbor, but all were subsequently picked up.

Review of Current Trade Conditions

Ontario

The chief subject that one hears discussed by Ontario lumbermen nowadays is the trade arising out of the manufacture of ammunition boxes. This business is resulting in the movement of quite a fair quantity of stock and if one were to judge by the remarks made in a good many offices it is about the only trade of any size that is in progress. Those who are closely in touch with the business report that the ammunition box production is not bringing in any profits to those who have obtained the contracts as the prices secured by competition by the shell committee are too low. So far as the lumber manufacturer is concerned, however, the business is a blessing, as it is resulting in considerable movement of stocks. Lumbermen in Ontario are also commencing to take a lively interest in the possibilities connected with the requirements of the allied governments for portable houses. A large order of this nature was recently reported as about to be let in the United States. Whatever the facts in this connection may turn out to be there is a good deal of indignation in Canada regarding the matter, as Canadian plants are ready to handle an unlimited amount of such work and feel that they ought to get it if it is being placed anywhere. Interesting letters on this subject will be found elsewhere in this issue.

Trade conditions in general are extremely quiet and it is not possible to pick out any single line for special notice. The hemlock situation, although it has not shown any change, is considered by those who are in close touch to be more promising than it has been for some time back. The low prices which have prevailed have been the result, to a large extent, of the cutting of prices by manufacturers with small stocks of poorly manufactured hemlock. They have set the price for the rest of the market. Most of this stock has now gone into consumption and the outlook is that those who have better stocks on hand will hold them for better prices. The large manufacturers report that their output of hemlock next winter will, in most cases, be considerably reduced as compared with previous years.

Eastern Canada

Reports from Montreal indicate that the export trade to Great Britain and to the United States has improved to a slight extent, but that the domestic trade continues to lag. In connection with the export trade to Great Britain the scarcity of vessels and the high freight rates are still causes of great trouble and to these there has commenced to be added considerable delay at times in the shipment of stock by rail to the vessels.

The market for eastern spruce at Boston is fairly steady. Frames are quoted by most of the important manufacturers at $23 base by rail to Boston, but there is still some business at $22.50. The demand for random is fair and prices are steady. The call for 2 x 4 is well sustained at $21 to $21.50 and other sizes are quoted as follows: 2 x 3, 2 x 5, 2 x 6, and 2 x 7, $20 to $22.50; 2 x 10, $23 to $23.50; 2 x 12 $23.50 to $24. The demand for boards continues quiet. Hardwoods at Boston are quiet. A few orders for birch and maple have stirred up a little interest. One inch firsts and seconds are quoted as follows: basswood $43 to $45; red birch $52 to $54; sap birch $43 to $46; plain oak $57 to $62; quartered oak $85 to $89; maple $38 to $41. The demand for shingles at Boston is quiet. White cedars are quoted as follows: Extras $3.20 to $3.40; clears $2.70 to $2.80; second clears $2.25 to $2.40. Red cedars are bringing a little higher prices. The demand for lath is good. For 1⅝ in. the rate is steady at $4.05 to $4.10; 1½ in. $3.60 to $3.65.

Great Britain

No important change is reported in the spot market at London. Imports are about normal and the same applies to deliveries. Freights are still the chief drawback in connection with trade expansion. The latest reports state that the White Sea trade is becoming more and more difficult, with rates at about 150 shillings per standard for prompt shipment. Values are therefore very firm. Deliveries at London docks during the week for which the latest information is available, amounted to 7,423 standards as compared with 8,955 standards during the corresponding week of last year. At Foy, Morgan & Company's recent auction sale 3 x 11 u/s Montreal red pine was sold at £20, and 3 x 9 second Quebec red pine brought £17 5s. Spruce and white were sold as follows: 3 x 11 and up u/s Halifax at £18; 3 x 10 ditto at £19; 3 x 9 ditto at £17 10s; 3 x 8 ditto at £16 5s; 3 x 7 ditto at £16 and £15 5s; 3 x 6 ditto at £16 5s, and 3 x 4 at £14 15s.

A good steady trade is reported from Liverpool, largely in goods required for government work. The c.i.f. spruce deal market is in better condition than it has been for a month or more. Purchases, however, are not any too numerous or profitable. Freights are still against the shipper and likely to become more so. All the spruce now in port and all that is likely to come, will be wanted, and it appears as though the present is the best time for consumers to lay in their stocks. A large proportion of the goods on the quays are sold and there are no stocks carried over from last season by importers or consumers. Birch prices continue very firm, stocks are low and the demand is good. The arrivals are small and are expected to continue so. Arrivals of Canadian pine deals continue very light as compared with previous years. This is largely due to the scarcity of tonnage on the regular liners, better rates being secured for other goods. The prices of all classes of pine goods continue high. Reports from Manchester give an interesting side light on the consumption of lumber for accommodating the troops. At one camp wooden erections have been made to accommodate 20,000 men, and it is understood that this accommodation will have to be doubled. Spruce deals from St. John, mostly in 3 x 6 in., 7 in. and 8 in., are offered in Manchester on the basis of £13 10s for scantlings, "below bridges," plus war risk, but the war risk is gradually increasing and is now about 2 per cent. from eastern Canada to Manchester.

United States

The demand for lumber in the United States continues to be of a very quiet nature, and has not shown any new developments during the past fortnight. In a few sections of the country activity is reported, and in others a slight indication of improvement, but generally speaking the situation is quiet and unpromising. To some extent there is improvement to note in connection with yellow pine. Most of the manufacturers report a slight increase in volume of orders and shipments, also a slight improvement in prices of certain lines. Railroad requirements seem to be increasing. An interesting feature of the trade is the fact that, for the first time this year, reports are coming out of car shortage, resulting from concentration of cars for the movement of grain. In the west there is little of interest to note. The rail trade, however is almost up to normal. The shipment of fir by water, although suffering from lack of vessel space, is quite extensive and a slight improvement in price is reported.

The movement of northern pine by the lakes is fairly extensive and improvement is reported in the demand for factory lumber. This demand is well distributed throughout Wisconsin, Minnesota and the east. White pine operators in Wisconsin, Minnesota, Idaho and elsewhere are arranging in most cases to increase their output. There is no interesting development to report in connection with hardwoods. The chief demand continues to be for specialties, some of which are for war use. The export trade appears to be improving. More space is available by regular liners, both on the Atlantic and Gulf coasts.

The white pine market at Washington remains good for most grades but increased trade is reported for box lumber. There is also a fair demand for pattern stock and the industries making use of it are showing greater activity. Stocks of white pine at Buffalo are well assorted.

The South African Mining Journal, in a recent issue, publishes the following prices of deals and other wood goods at Johannesburg on June 5th:—Deals, Baltic, 9 by 3 up to 17 ft., 9d. per ft.; above 9¼d. Deals, Oregon, 8½d.; flooring, 4d.; ceiling, 2⅞d.; Oregon pine, 3s. 9d. per cubic foot; Oregon pine, pitch pine logs up to 40 foot lengths, 3s. 9d.; Jarrah, 7s. 6d.; teak, small planks, 14s. 9d.; large, 15s. 6d. c.f.; clear pine, ½ in. by 12 in., 6¼d.; clear pine, 1 in. by 12 in., 7¼d.; poplar, ½ in. by 12 in., 6¼d.; poplar, 1 in. by 12 in., 7¼d.; shelving, selected pine, 5¼d., per 1 in. by 12 in.; mouldings, cornice, 4 in., 1½d., 5 in., 2¼d.; architraves, same price as cornice; windows, Johannesburg make, 4 lights size of glass 15 by 30, 1½ in., 29s.; 1¾ in., 34s.; casement sashes (Johannesburg make), 4 lights, glass 7 in. by 9 in., 3s. 6d. each; 6 lights, glass 7 in. by 9 in., 4s. 6d.; 8 lights, 8 in. by 10 in. glass, 8s. (all 1½ in.); fanlights, 3 ft. by 1 ft. 6 in., 7s. 9d.; doors, 6 ft. 6 in. by 2 ft. 6 in. 1¼ in., 12s. 6d.; 1½ in., 14s.; 1¾ in., 18s. each; door frames, 6 ft. 6 in. by 2 ft. 6 in., 14s.; door frames, fanlight, 20s.; 7 ft. by 3 in., 19s. 6d., and 26s. respectively.

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

Montreal Export Trade Fairly Active

Montreal, August 10th (Special to the Canada Lumberman):—As an offset to the decidedly dull local business, an improvement in exports to Great Britain and a fair demand from the United States have to be reported. August is always a lean month for the lumber trade, but the present period shows even a larger falling off than was expected, even taking into consideration war conditions. It is probable, however, that an early improvement will follow, as there are several fair-sized buildings under consideration. A glance at the following figures will indicate how business in the city has been affected by the European situation:—For last month the building permits totalled $432,490, a decrease of $2, 089,030 as compared with the corresponding month last year. For the year to the end of July, the value was $3,851,599, a decrease of $7,191,833.

Shipments to the United Kingdom continue to go forward at a good pace. Ocean freight rates are slightly easier, now being quoted around 140s. per standard. Watson and Todd have despatched the Danish steamer Skanderborg with about 1,000 standards of pine. One shipper complains of being seriously handicapped by the late arrival of cars, thereby missing boats. Further, promises of space are not always kept, with the result that cars are ordered to the docks and then only a portion of the lumber can be sent to the other side. This involves a considerable sum in demurrage and wharf charges, which are a dead loss to the exporters. Owing to the low state of the water in the harbour the boats are not able to take full cargoes.

Ground wood is in very slow request from the United States, where the water powers are favorable to local production. Sulphate, however, is selling better, with the prospect of higher values. Newsprint continues a satisfactory market, the export business being still good.

Another party of United States capitalists have passed through Montreal on their way to inspect the plants of the North American Pulp and Paper Company. From Chicoutimi they went to Chandler, where the manufacture of sulphite pulp has just been commenced. The party, which was headed by Mr. T. Herrick, of Cleveland, late United States Ambassador to France, made the trip on the invitation of Mr. J. E. A. Dubuc, the president of the company.

Parrsboro Export Stocks Plentiful

Parrsboro, N.S., August 6th Special to the Canada Lumberman)—The lumber shipments from port of Parrsboro for Great Britain during July aggregated 5,823,692 superficial feet of spruce, hemlock and hardwood deals and scantling. By far the greater part of the shipments was spruce, but there was more or less hardwood in each cargo, and one or two vessels carried a small quantity of hemlock. The output was sent forward in two Norwegian steamers, two Norwegian barks and one Parrsboro schooner. This gives an idea of the character and nationality of the bottoms employed in the lumber trade of this port this season. With the exception of one English sailing ship, now finishing loading, and half a dozen or more locally owned tern schooners, all the shipments from this port have been in foreign vessels. Of these the great majority have been Norwegian, with a sprinkling of Danish and Russian veessels. Those of the Norwegian—two steamers and a bark—have been fixed to load here again this season.

The decline of prices in the British markets has had an effect upon the shipments here, and there is much less activity than there was earlier in the season. But there is still a large quantity of lumber that must be shipped soon or held over, so it is probable that business will be as brisk as ever next month. Freight rates appear to retain pretty well their abnormal altitude, for one schooner that has just returned from England has been chartered to load again here at 135 shillings per standard.

Exports to the United States are smaller than they have been for many years. The only shipment from this port last month was one small cargo consisting of 87,831 feet of spruce boards and 627,000 laths. Unless the market in the United States improves there will be a marked falling off in the exports to that country as compared with the business of other years.

The schooner Gypsum Queen, a Parrsboro vessel, has been abandoned four hundred miles from the English coast. She was built at Parrsboro 24 years ago and had a cargo of deals from Halifax.

Trade Very Quiet at St. John

St. John, N. B., August 9th (Special to the Canada Lumberman): Locally the market remains as it did two weeks ago. The month of July was the quietest month in this end of the business for some years. No new work has been started of any importance. Only positively needed repair work is being carried on. The lumber yards are stocked to full capacity in boards, both merchantable and refuse; also refuse deals and scantling are being carried in very large quantities and prices are very much shaded, being off from $2 to $3 per thousand under last year's quotations. Each yardman is on the hustle, but is finding business scarce, and his competitor is always to be found cutting the price to make the sale. No change is anticipated for some time, probably until war conditions change. Large shipments of English deals from this port have taken place during August, and today stocks on wharves at St. John would not reach over ten million feet at the mills. Of course, a considerable stock of country, or rotary sawn deals is to be found here. Both Mackay and Moore were very heavy shippers during the past month, largely of stock from city mills, with, of course, the usual proposition of country sawn. Prices for deals are said to have fallen £2 10s. per standard. Freights remain very firm at from 130s. to 135s., and with no relief promised for the near future. Mills here are running steadily, some sawing American plank and deals, of which there is said to be about fifteen million feet on wharves at the mills of Stetson, Cutler & Company, and other mills which have been sawing for them. This market, viz., for the United States, remains unchanged, although a better demand is reported, but no raise in prices, $22.50 to $23 being the base. If orders keep coming along as freely as during the past ten days an advance should be looked for. Laths have weakened about 10c per thousand, but this may be only a temporary drop as only a limited quantity of laths are being made. The shingle market, both locally and in the United States, shows no change; extras $3.10, clears $2.85; 2nd clears $2.50, ex. No. 1 $1.70. These are all local retail prices. Some reductions are allowed for wholesale purchases. The box shook and stave business is affected like all others by slowing up of business in general. The nail makers are shipping large quantities of nails in bags to foreign markets, as kegs are not used for foreign shipments at all. This is sorely felt by the mill men, as the kegs help to work up the waste.

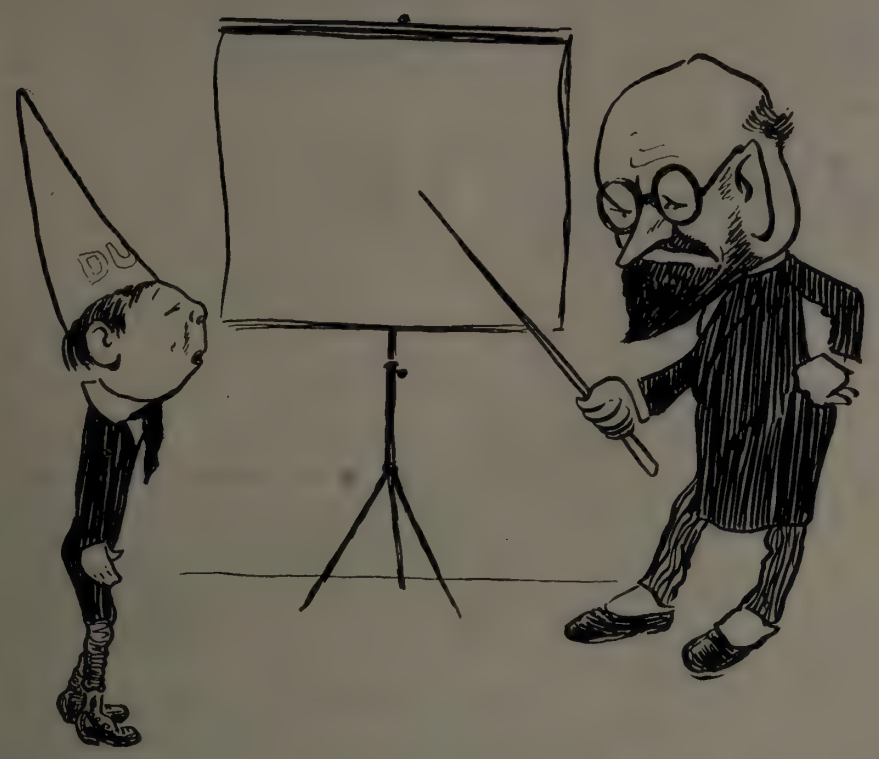
The river is very low, in fact the lowest it has been in years. The further inland one goes the dryer it is, and what logs are in the river are hung up high and dry. Up to August 1st about 36 million feet of logs had been rafted out of booms at Fredericton and delivered to the booming privileges at St. John. Labor is in abundance and no strikes of any kind have marred the horizon during the season.

Ottawa Trade Quiet—Incendiary Lumber Fires

Ottawa, August 6th (Special to the Canada Lumberman):—Lumbermen in Ottawa and district have been suffering heavy losses lately as a result of fires, which there seems to be little doubt are of incendiary origin. Three weeks ago over 200,000 feet of dressed pine was destroyed by fire in Gilmour and Hughson's yards at Hull, entailing a loss of over $6,000. Last week there was another outbreak, making the fifth within the last eight months, in which the loss totalled $5,000. The aggregate loss for the five fires amounts to over $25,000. In spite of the fact that Gilmour and Hughson's have a double staff of guards on duty, the fires occur. The firm is inclined to believe that some person or persons have a desire to destroy the whole plant.

There is little to note about trade conditions which have not altered since the last writing. All the mills are working and have not been hampered so far by the lack of water, but there has been a rather substantial fall in the Ottawa and its tributaries lately. The prospects are, however, that if the remainder of the season is not abnormally dry the inconveniences that were felt as a result of the drought last year, will be avoided this season. The outlook for an improvement in business is not very encouraging just at present.

When the city of Hull was fire swept in 1900 and a big part of the E. B. Eddy Company's plant was destroyed, the council of that city granted the company, by way of encouragement to the directors to rebuild on the same site, exemption from municipal taxes for 15 years. The 15 years have gone and last week the Hull civic authorities notified the company that their bill would be $20,000 more annually in future. With the exemption from taxation a fixed valuation



A HARD LESSON

For many people to learn is how to buy right, that is to obtain the greatest value for every dollar expended. This is more true of lumber than most commodities.

Price does not establish Value. You know from experience that some of the most expensive material you have ever bought was purchased at the cheapest price.

Our business has been built up on a "value" basis. We aim to give the fullest possible value for each and every one of your dollars.

THAT ORDER PLACED WITH US INSURES

Prompt, Courteous and Efficient Service.
The choicest lumber, best grades and smoothest mill work.
Your most critical customers pleased.
Satisfaction from start to finish, and the mental relief that this assures.

If your business needs a Spring Tonic, try a car of Fenderson Spruce, New Brunswick Shingles, and Lath,—if your trade is not as good as you'd like,—try the "Quality Policy" as a stimulator. One of the best advertising mediums you can employ.

Make that next car a Fenderson Car. You'll like it.

John Fenderson & Co.

Incorporated

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27 Besse Place
Springfield, Mass.

MILLS AT
Sayabec, Que. **Cedar Hall, Que.**
Salmon Lake, Que. **St. Moise, Que.**
Jacquet River, N. B.

WE CARRY THE LARGEST AND BEST ASSORTMENT OF DRY SPRUCE IN CANADA

was placed on other properties of the company at $400,000. The total assessed value of the Eddy plant is now given at $2,000,000.

When the International Joint Waterways Commission meets next month a matter of great importance to lumbermen will come up for consideration. This is the question of the levels of the Lake of the Woods and its adjacent or tributary waters. The Commission has been asked to recommend to the governments of Canada and the United States a basis for the establishment of levels on the lake that will be of the best service to lumber and other interests on both sides of the waterway. Some, it is understood, prefer to have the water kept at a low level, and others want a high level maintained. The importance to the lumber trade in the matter is due to the fact that large quantities of lumber are brought down every year through the lake and its tributaries to mills on the Rainy River and along the shores. The first sitting of the Commission will be held at Warroad, Man., then later at International Falls, Minn., where one of the largest paper mills on the continent is situated, and at Kenora, Ont.

Lieut.-Eric McLachlin, a member of the lumber firm of McLachlin Bros., Arnprior, recently qualified as a member of the Royal Aviation Corps. He left for England a few days ago to be assigned for duty at the front. He trained and qualified in the aviation school, Toronto.

Lieut. D. J. O'Donahoe, secretary-treasurer of McAuliffe Davis Lumber Company, has been attached to the 77th Battalion, which is being mobilized in Ottawa.

Market for Canadian Lumber in Cuba

Douglas fir.—Samples of Douglas fir received by a local merchant have been found superior to the United States long leaf yellow pine. If tonnage from Vancouver to Havana, through the Panama Canal could be secured at reasonable freight rates, important orders would probably follow. The annual import of yellow pine into Cuba amounts to more than 100,000,000 feet. This lumber is usually shipped from Pensacola, Fermandina, Moss Point and Mobile. Excellent wharf accommodation offers every facility for the discharge of vessels.

Spruce.—A dealer in Havana claims that the demand in Cuba for Canadian spruce is increasing and suggests that, with a freight rate of $12 from the Pacific coast to Havana, a profitable business could be made. The dearth of this commodity, however, would even warrant a satisfactory trade at freight rates of $14 per thousand feet.

American Timbers Higher in Australia

On July 1st the timber merchants of Sydney, Australia, advanced the prices of American timbers. This is the first movement in imported timbers since the commencement of the war. Oregon has been put up nearly 50 cents per hundred superficial feet and redwood approximately 25 cents per hundred superficial feet. These prices do not represent anything like the increased cost of importation, and on over-sea prices merchants would have been justified in advancing local rates months ago. They felt, however, that it was far better to keep the building trade going even at a very small profit than to charge what might seem to be a fair rate and lose a lot of business because of people refraining from building. It is felt, however, that the time has now arrived when an advance can be no longer delayed. Practically it is the freight charges which have made the increase necessary. The f. o. b. charges in America have remained unaltered at $10 per 1,000 superficial feet. Freights, however, have advanced during the period of the war from $7.05 to $19.20 per 1,000 superficial feet, and the cost of landing Oregon is now $30.40 per 1,000 superficial feet, compared with $18.25 a year ago. The cost of importing redwood to-day is $54.15 per 1,000 superficial feet, whereas 12 months ago it was $37.70. Oregon, it will thus be seen, costs $1.20 per 100 superficial feet above rates a year ago, while up to the present only 50 cents more is asked from the user. The advance follows a reduction of about 12 per cent. recently made in the rates of Australian hardwoods.—Sydney Herald.

The Commonwealth Timber Securities Company Organized

The Commonwealth Timber Securities Company has been organized by Edward J. Young, of Madison, Wis.; Grant T. Stephenson, of Marinette, Wis., and Frank R. Barns of Chicago, Ill. The capital stock of the company is $150,000. It opened offices on August 10th under the management of Frank R. Barns. The officers of the company are: Frank R. Barns, president and treasurer; Grant T. Stephenson, vice-president; Edward J. Young, vice-president and secretary. The directors and stockholders of the company are identical with its officers.

The company's business will consist of the purchase and sale of timber lands and timber securities. A booklet fully explaining the company's operating plan and form of security is now being prepared and will be available for distribution within the next thirty days. The purpose of the organization will be to purchase carefully selected tracts of timber during periods of business depression like the present, and to co-operate with their clients—the purchasers of the securities—in holding such tracts until better conditions and improved timber values justify their sale.

Frank R. Barns has been actively engaged in the lumber and timber business for eighteen years, and for the past four years has been an officer and director of Clark L. Poole & Co., of Chicago.

Grant T. Stephenson has been connected with the lumber and timber business for the past ten years, and is a trustee of the I. Stephenson Company, Wells, Michigan, director of the Menominee River Boom Company, Menominee, Michigan, and vice-president of Young and Stephenson, Inc., Madison, and Milwaukee, Wisconsin.

Edward J. Young has been engaged in all branches of the lumber business for twenty years, and is president of Young and Stephenson, Inc., Madison and Milwaukee, Wisconsin, president of the Orford Bay Timber and Logging Company, Vancouver, B. C., and secretary and director of Brittingham and Young Company, Madison, Wisconsin, and Vancouver, B. C.

Visit of Box Shook Buyer to Canada

The head of a firm who is probably the largest buyer of box shooks in the world is likely to be in Canada in September, and it would be convenient if firms producing or able to produce suitable material would favor the Department with their names and addresses, together with probable capacity for submission to the gentleman named on his arrival.

Timber Cruising and Surveying

On page 43 of this issue will be found the announcement of Messrs. Roray & Yeaman, timber surveyors and estimators.

Mr. Roray came to the Pacific Northwest in 1895, from Orange, Texas, where he had been in the employ of the Lutcher & Moore Lumber Co. Arriving at Seattle, he entered the employ of the Seattle Cedar Lumber Co., and remained with this company for two years. Wishing to gain by actual experience a wide general knowledge of lumber and logging conditions of the Pacific Coast, he went to Nelson, B. C., and took charge of the operations of a saw mill on Kootenay Lake. Later, returning to the State of Washington, he spent several years with operating logging and milling companies in the woods of that state, gaining a valuable knowledge of standing timber. He then entered the employ of the Larson Lumber Co. as sales manager, but remained with them only a short time, leaving to form the Allen-Roray Co., which company purchased timber in Skagit County and engaged in manufacturing shingles. After this mill was cut out Mr. Roray came to British Columbia and was active in forming the Howe Sound Mills & Logging Co. This company has timber holdings on Howe Sound and a mill adjoining Vancouver, in which Mr. Roray still retains his interest.

Mr. Yeaman came to Vancouver in 1909 from Indianapolis, where for twenty years he had been with E. C. Atkins & Co., saw manufacturers, and entered the employ of the A. J. Burton Saw Co. as salesman. Shortly after this he accepted a like position with Henry Disston & Sons, Ltd., covering British Columbia and Alberta, and remained with them in this position, and later as manager of their Vancouver branch, until August 1914, at which time he joined with Mr. Roray in forming the firm of Roray & Yeaman. During the time Mr. Yeaman was on the road and acting as manager at Vancouver, he formed a wide and favorable acquaintance with the mill men and loggers of his territory.

Mr. Yeaman's experience and ability as a salesman, and Mr. Roray's practical experience and technical knowledge of timber, forms a combination that well fits this firm to carry out the work for which it was formed. All cruising and investigation of timber properties is under the personal supervision of Mr. Roray, who is ably assisted by Herman Tuller, a cruiser and estimater of wide experience.

Progress of an encouraging nature is reported in the United States in connection with reaching a business-like understanding with the railroad companies for the regulation of matters pertaining to the classification of lumber for freight purposes. An opportunity has been presented to the lumber industry to consider with the railroad representatives the more important questions of lumber classification. Mr. Eugene Morris, Secretary of the Railroad Classification Committee, has expressed his readiness to hear from the representatives of the influential lumber organizations of the country as to how to arrange for conferences between the traffic representatives of the railroads and the representatives of the lumbermen. The matter is now being brought to the attention of the lumbermen by the National Hardwood Lumber Association and by the Lumbermen's Association of Chicago, and it is probable that definite steps for presenting the interests of the lumbermen in the most effective manner will be taken.

TIMBER CRUISING SURVEYING

ADDRESS ALL COMMUNICATIONS TO THE FIRM AND NOT TO INDIVIDUALS OR THE RAILWAY COMPANY

P. WELCH

RAILWAY CONTRACTOR

PACIFIC GREAT EASTERN RAILWAY

TELEPHONE SEYMOUR 9547.
PRIVATE EXCHANGE CONNECTING
ALL DEPARTMENTS.

SUITE, 404 WELTON BUILDING.

VANCOUVER, B.C. June 28th, 1915.

IN YOUR REPLY PLEASE QUOTE ATTENTION OF D.C.Pennington.

Re Cruise and Report on loss and damage by fire to timber on Lot 2498 (T.L. 30260), N. W. D.

Messrs Roray & Yeaman,
814 Dominion Building,
Vancouver, B. C.

Dear Sirs:-

Referring to your enquiry of June 23rd, in connection with the Cruise and Report made by Messrs Roray and Fuller covering loss and damage by fire to timber on Lot 2498 (T.L. 30260) New Westminster District. We are glad to say this work was performed to our entire satisfaction; the details and summaries of the report were compiled in a thorough and comprehensive manner, and from our personal knowledge and other data concerning the matter, we are convinced as to the accuracy of your returns. If, in the future, we again have work of a nature requiring the services of experienced timbermen, we shall not be satisfied with a service of less value than that furnished by yourselves.

Very truly yours,

DCP:P P. WELCH

E. J. White Manager

ALL work which we undertake is carried out by expert cruisers, under our personal supervision. No job is too small or too large for us.

WHY not let us tell you about the tracts of choice timber and operating mill properties which we have for sale. You are entitled to the information. Our twenty years connection with the TIMBER and LUMBER industry on the Pacific Coast has given us a knowledge that will be valuable to you. It is yours for the asking.

Roray & Yeaman

Timber Factors

American Office—221 Alaska Bldg.,
Bellingham, Washington

Dominion Building,
VANCOUVER, B. C.

An Important Branch of the Building Material Business—Porch Work

By a Lumber Association Secretary

Quite an important part of the material business of every building season is made up of porch work. There are porches for the new buildings and many porches added to old buildings, so that with it all for several years now porch work has been an important part, much more important than previously, of the building material business. It includes front porches and, as a conspicuous item, sleeping porches, and often, with the co-operation of an enterprising lot of carpenters and builders, much more porch work can be stimulated than is naturally done.

The porches of to-day are much similar in outline and generally more massive in apearance and construction than they were a decade ago. Much of the old scroll and bracket work and ball and rod work has disappeared. There has come lately some scroll lines in exposed parts of roof construction which is a development of the bungalow type of architecture, but, taking the business as a whole there is not much gingerbread any more, and as a rule it is either heavy round columns or square columns and extending cornices.

Another change that has come in this era of porch building is in the tendency to use concrete extensively in porch construction. In this, as in every new idea, there is a tendency while the idea is new and popular to carry it to extremes, which will result eventually in some reaction. There is really room for much more use of wood in porch construction and better satisfaction to be derived from it.

Arguments that have been heard about the relative cost of concrete and wood in porch construction have led to some investigation of the subject which brings out some remarkable contrasts in the cost of porch construction that should not exist.

Another peculiar fact developed in this connection is that the oak flooring folks themselves have never exploited their flooring extensively for porch work. This seems odd in view of the fact that narrow oak flooring makes the best kind of a porch. This is not a matter of guesswork with the writer, but it is a demonstrated fact that is supported by about a thousand feet of oak porch flooring on the writer's own home. It is No. 1 common 1½-inch face and it makes a splendid floor that costs less than half the price charged for some special porch flooring.

The oak flooring folks are more concerned with exploiting the higher grade, higher priced flooring as an artistic proposition and seem to have some apprehension that the use of common stock painted on the porch floors will detract from the value and appreciation of oak as the ideal material for the finest floors. This, in the writer's opinion, is a mistaken idea, and it is just as important to exploit porch flooring as it is hardwood floorings for factories.

This is not specifically an exploitation of oak, but rather a desire to present some good ideas about wooden floors for porches, ideas taken from actual experience. Where thick common oak stock is available in narrow strips this is, in the writer's opinion, the best porch floor that can be had. However, splendid floors can be made from pine, fir, cypress or any of the woods that will stand service and exposure when painted. The best results for the least money in either case may be secured by using narrow stock in mixed lengths. Of course, it is ideal to have all single length pieces in the floor, but it is an expense which does not justify itself. The main thing to get a good floor is to use narrow strips preferably no wider than two inches, and it is the writer's opinion from eperience that 1½-inch face is better. Stock of this kind either end matched or joined over a joist will make just as good a floor as full length stock.

The competition in porch material between concrete and wood does not end with the floor, though the floor is an important consideration, but extends even to the columns. The offerings in columns now include concrete columns metal columns and brick piers are entering considerably too. Strange as it may seem, too, some of these are offered to the consumer cheaper than wood.

The only explanation found for this is that somehow the retailers are often asking more than they ought for wooden columns, or else it is costing more to manufacture them than it should. It should be practical to manufacture a wooden column cheaper than any of the competitive offerings. We have machines and methods that will do this, and those who are following long, tedious processes for manufacturing columns need to take a few kinks out of their system and shorten up their process.

Woodwork is more attractive in a porch than concrete and brick, just as it is more attractive in the interior of the home, and with the present wide spread tendency to sleep in the open air and to make the sleeping porch a part of every home there should be a better chance than ever before to push the wood products in competition with others, because certainly a sleeping porch with a wooden floor and constructed largely of wood is more desirable and attractive than one of cold concrete, or of metal.

There is a chance in porch work to do a lot of good exploiting of wood products that will help make a profit for the lumber retailer and the local planing mill man and to make more satisfactory homes for the people.—St. Louis Lumberman.

Toronto Fair to be the Best on Record

There was never a time in the thirty-seven years of its history when the Canadian National Exhibition promised more real instruction and entertainment than this year. In addition to the marvelous proofs of the manner in which the patriot at home is taking care of his responsibilities in the way of increased production that the patriot at the front may have the wherewithal to keep his place in the battle-line, there will be special features of patriotic and historic significance.

The big war spectacle in front of the Grand Stand will be quite the most elaborate pageant ever presented by the Fair, while the Model Military Camp, aeroplane flights and the mining and torpedoing of ships in the harbour, supplemented by the war trophies, will be a revelation.

The new Giant Midway, with its army of spielers, never presented a more diversified list of attractions, while the Hippodrome and Circus in front of the Grand Stand will be a triumph in the amusement line. The Fair this year in all departments promises to excell any previous one ever held at Toronto.

The Directors are looking forward to a repetition of the "Million Year" and are planning their programme on a scale to fit this immense attendance.

Canada's Export Trade in Forest Products

During the twelve months ended April 30th, 1915, Canada's exports of forest products amounted in value to $42,705,384. During the three previous years the totals were as follows:—1914, $42,797,-161; 1913, $43,646,733; 1912, $40,717,190.

Details of the exports of wood and manufactures of wood for the twelve months ending April 30th, 1915 and 1914 are as follows:—

Wood and mfrs. of—Total	50,068,250	52,764,845	11,863,465	38,638,111
Logs	472,745	1,229,405	23,467	1,205,467
Lumber—Deals, pine	1,390,086	1,150,510	1,073,420	57,723
Deals, spruce and other	6,466,999	6,506,475	5,998,086	461,384
Laths, palings and pickets—	1,895,812	1,956,035	27,257	1,911,366
Planks and boards	19,531,256	19,007,009	1,633,005	16,041,768
Shingles	1,878,914	3,019,323	190	2,980,368
Timber, square	540,175	528,477	515,083	5,619
Wood blocks for pulp	7,422,409	6,667,671	.....	6,667,671
Wood pulp	6,442,579	9,319,450	1,429,765	7,542,039

National Lumber Manufacturers' Inter Insurance Exchange

Lumbermen in all parts of the United States and Canada are taking an interest in the National Lumber Manufacturers' Inter-Insurance Exchange, Chicago, Ill., the membership of which is made up of individuals, firms and corporations manufacturing and dealing in lumber. The attorney and manager is Mr. Charles F. Simonson, who has been identified with the insurance business for about thirty-five years, covering a very wide field. The exchange provides an ideal manner for lumbermen who have high grade risks to arrange for insurance, upon a plan that provides unerringly for efficient management. The liability of members on any one risk is limited to the amount annually deposited by them for indemnity. The exchange is receiving support from manufacturing lumbermen in all parts of the country and has written close to $2,000,000 in business since starting on February 15th, 1915.

Mr. O. W. Madden, of the James W. Sewall office, Old Town, Maine, is engaged in making a thorough estimate of about 100,000 acres in the northern part of Maine, for the State. This work is being carried out under the direction of the Board of State Assessors for purposes of valuation, and it is expected that the data gained thereby will greatly assist in equalizing taxes. Mr. Madden expects to be in the field until November.

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The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

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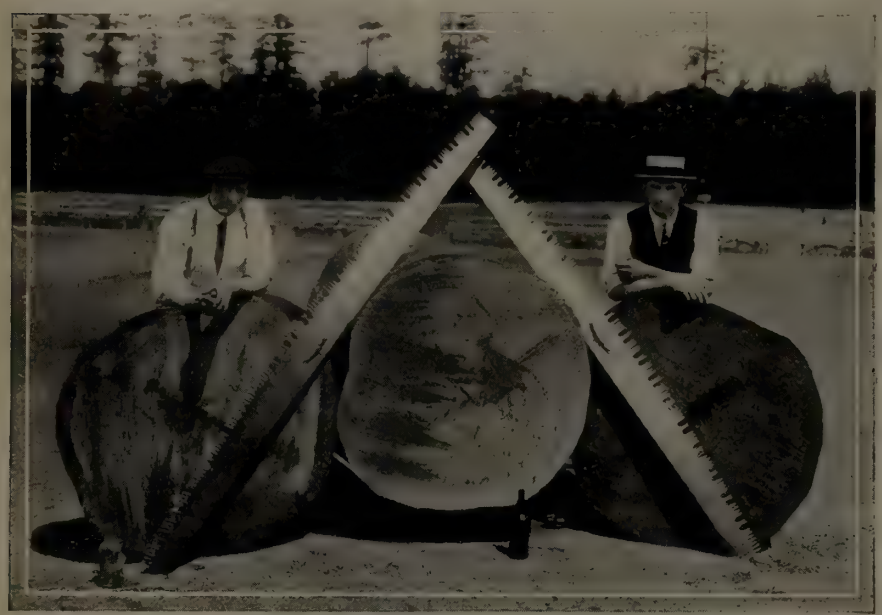
Bucking Up Contest Winners

An interesting cross-cut sawing contest was held during the Shriners' convention in Seattle, Wash., in July.

Forty-one inch hard fir logs were selected on which the contestants might try their skill. Mr. Chas. A. Newton beat the world's record and won a purse of $75 in gold by making the quickest cut, time 8 minutes, 10 3/5 seconds. Mr. C. H. Maynard won second place and a purse of $25 in gold, time 8 minutes, 34 3/5 seconds. The judges and time-keepers for the contest were four of the most prominent loggers on the coast.

Both the winners used 7½ ft. Simonds Crescent Ground Cross-Cut Saws and attribute their success in part to the easy-running, fast-cutting saws used. Mr. Newton is a student at the University of Washington. He is captain of the rowing crew and one of the leading athletes at the University.. Mr. Maynard is foreman in the logging camp of the High Rock Logging Company, Monroe, Washington, and is a good sample of the active, well-educated, athletic young men who may be found in the logging camps and lumber mills in many places on the Pacific Coast.



The Winners, the Saws, and the Logs.

Batts Limited Exhibit at the C. N. E.

Batts Limited of Toronto, manufacturers of veneered and pine doors, staved columns, newels, greenhouse material and rough and dressed lumber, will again have attractive exhibits at this year's Canadian National Exhibition, showing all the latest designs in these materials. Every dealer and contractor should make it a point to visit this exhibit. A feature of the exhibit will be the giving away of thousands of new and handsomely illustrated catalogues of all their lines, brim full of valuable data, a copy of which no one interested should miss. In their modern factory in West Toronto this progressive firm is fully equipped to take care of all orders from the highest class interior finish to the smallest order, with the same care and promptness that has built for them a widespread and enviable reputation.

Upper Fraser River Lumber Company's Mills

The Upper Fraser River Lumber Company, comprising Eastern Canada capitalists are establishing a large sawmilling industry at a point on the Grand Trunk Pacific Railway, about 400 miles west of Edmonton, Alberta. The company control about 281 square miles of limits running about 60 per cent. spruce, the balance fir and cedar.

The Upper Fraser River Lumber Company started operations in February, 1913, by erecting a portable sawmill to cut out the material for a large sawmill and other necessary buildings at the rate of about 20,000 feet per day, the work being in charge of J. O. Kendall, a well-known Coast manager and mill designer. The portable mill started cutting inside of two months after the arrival of the men on the scene. A start was made on the frame of the big mill in July, 1913, and the structure was roofed in early in September following. In the meantime part of the gang had been kept busy logging off and cleaning up part of the mill site of 86 acres, putting in a spur line 1,000 feet in length to tap the main line of the G. T. P., and erecting camp buildings. About fifty men were employed in these preliminary operations. The fitting up of the big mill, which is to have a capacity of 100,000 ft. in ten hours, has not been pushed owing to the poor market conditions preceding and following the outbreak of the war. Considerable close-in logging was done last season, and it is expected that a large quantity of timber will be taken out early in the spring so as to have material for a start should conditions improve on the prairies, where the output will be marketed.

The main mill 37 x 168 ft. in size, will have another mill 30 x 140 ft. alongside to house a twin circular and lath mill machinery, for an output of 50,000 lath per day. The equipment of the double mill will comprise 9-ft. band mill, gang circular, twin circular, four-saw edger, trimmer, five-saw clasher, circular resaw, steel carriage (Gunshot), steam set works, live rolls, transfers, etc.

The sorting shed, 40 x 200 ft., will be built at right angles to the mill. The plans also provide for a shingle mill 400 ft. distant from the sawmill buildings, with suitable dry kiln capacity or an output of 80,000 shingles per day, four machines to be operated. The planing mill building will be 82 x 150 ft. in size. The equipment will comprise two high-speed planers, one dimension machine, one sticker, rip-saw and three trimmer saws, the machines to be electrically driven. There will also be a capacious dry shed 40 x 360 ft., and warehouse 30 x 200 ft., alongside the spur track. The sawmill will have a steel water-jacket burner 90 ft. in height. The power house equipment will be of the most modern type.

The Morrison Lumber Measuring Register at the Exhibition

At the exhibit of the James Morrison Brass Mfg. Co. Limited at the Canadian National Exhibition this year, a special section will be reserved for the demonstration of the Morrison Lumber Measuring Register which is now in use in so many mills throughout the country with great success. The installation of this register on the matcher, planer, moulder, resaw or sorting table increases the efficiency of the mill and reduces the lumber handling costs to a minimum. It can be used for measuring lineal feet and board measure as desired. In addition, a full line of steam specialties will be on exhibit which should prove of great interest to lumbermen.

An Interesting Exhibit at the C. N. E.

An exhibit which should prove of interest to lumbermen visiting the Canadian National Exhibition this year, is that of Wm. Cooper & Nephews, manufacturers of Cooper's Fluid Dip, the widely known disinfectant and germicide, and Bitter Lick Medicated Salt Brick, the great conditioner, tonic, digester and worm destroyer. Cooper's Fluid Dip is a most efficient disinfectant and cure for thrush, mange, ringworm, eczema, bites, stings, etc. It is used by the Ontario Veterinary College and many other leading hospitals because it is pure, highly concentrated, uniform in strength and has no objectionable odor. It is also officially approved and used by the United States Government for foot and mouth diseases. Bitter Lick Salt Brick is a pure, highly concentrated medicated salt combined with linseed, roots and herbs. It is an effective preventative for worms. A good tonic and a splendid conditioner. Every progressive lumber camp should be stocked with a supply of both these remedies. Those visiting the Exhibition will have no trouble in locating the "Cooper" tent on the grounds, which will be in charge of McCrimmon & Son, the managers of the Canadian branch. This year the firm have secured the contract to disinfect all the buildings and grounds of the Canadian National Exhibition. Wm. Cooper & Nephews are an English firm with head office and factory at Berkhamsted, England, and their organization spans the earth.

Abitibi Company Building Model Town

The Abitibi Power and Paper Company, whose mills at Iroquois Falls, Ont., are now turning out news print, are laying out a model town like many other concerns operating pulp and paper plants in the north. Some years ago the Spanish River Pulp and Paper Mills Company erected a large number of dwellings at Espanola for the comfort and convenience of their employees, and their example is being followed at Iroquois Falls, where about 125 cottages will be erected. Some of these have already been completed and a large number of others are under way. There is a good waterworks system at hand, and each dwelling has a bathroom, is lighted by electricity and possesses other modern conveniences.

Booklet About Trees

A useful little booklet illustrating and describing the characteristics of twenty common Canadian trees has just been issued by the Canadian Forestry Association. The descriptions, which are by Mr. James Lawler, formerly secretary of the association, are written in simple language free from technical terms, and there is a photograph of each tree with a drawing of its leaf. The book is intended primarily for boys and girls, and it is hoped eventually to place one in the hands of each child in the country, but it will be welcomed many adults who wish to learn how to distinguish the more important Canadian trees.

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Boake Doors are the finest obtainable. They are real quality leaders. Long manufacturing experience and careful buying allow us to offer you a high-grade stock of hardwood interior and front doors in plain and quarter cut oak, birch, pine and fir.

Timber

In rough and dressed Douglas Fir and Yellow Pine timber we have sizes suitable for factory and warehouse construction. Large stocks on hand for prompt shipment.

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Limited

Toronto, Canada

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To make a success of advertising one must be prepared to stick to it, like a barnacle on a boat's bottom.

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& Woodworker

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Style No. 1 Northwest Tent

is constructed so as to resist any amount of wind or storm. An ideal sporting tent or a perfect raftsmen's or lumberman's tent. Can be erected so as to form a long narrow tent or a short wide tent by simply spreading side guys and slackening end guys or vice-versa.

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Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

R. E. Book, Smithville, Ont., who recently lost his sawmill by fire, is rebuilding his plant.

A portable sawmill at Starkville, Ont., belonging to A. Jackson, was destroyed by fire recently. There was no insurance.

The sawmill belonging to James Bryant, Norland, Ont., on Gulf River, was recently completely destroyed by fire.

R. D. Hall, Petrolia, Ont., intends to establish a plant for the manufacture of such products as clothes racks, farm gates, step ladders, cupboards and cabinets.

The Town Council of Collingwood are submitting a by-law to the people to provide for assisting the Bryan Manufacturing Company to rebuild their planing mills which were recently destroyed by fire.

The first run of paper from the mill of the Abitibi Pulp & Paper Company, Limited, at Iroquois Falls, Ont., was recently made. Only one unit is running at present. It is expected that the whole plant will be in operation by September.

A. D. Clingen, Martintown, Ont., whose saw mill, sash and door factory and dry kiln were recently destroyed by fire, reports that the loss amounted to about $11,000. There was no insurance. The lumber shed and practically all the lumber in the yard were saved. Mr. Clingen has not yet decided about rebuilding.

A despatch from Sarnia, Ont., reports that a raft containing four million feet of logs for the Cleveland-Sarnia sawmills, which was being brought down by the Reid tugs Fisher and Sarnia City, was blown ashore at Harbor Beach during the recent heavy gale. This is the second big raft in three years to go ashore at Harbor Beach. It was only a few months ago that the last of the logs from a previously stranded raft were salvaged.

An Ottawa despatch states that the J. R. Booth Company will probably, in the near future, curtail the lumbering end of its business temporarily, while making no change in the extent of operation of the pulp and paper end, which is at the present time a much more active and profitable branch. It is announced as probable that the night shift in the Booth sawmills will be shut down, as the company is not shipping any lumber at present and can only store what it cuts. It is rumored that another Ottawa valley lumber company, McLachlin Brothers, of Arnprior, may also shut down.

Eastern Canada

C. A. Spencer, Limited, has been incorporated with head office at Montreal and capital stock of $150,000.

The Swedish Canadian Lumber Company lumber mill at Richibucto, N. B., was closed down about the middle of July.

The Forrest shingle mill, at Ardley, B. C., (Burnaby Lake) was recently damaged by fire to the extent of $2,000, which is covered by insurance.

An Indian named Peter Gloude and a white man named James Aurenberg have confessed to setting fire to Harlow and Kempton's mill at Milton. N. S.

L. H. Martin, Bury, P. Q., recently lost his sawmill by fire, the loss amounted to $8,000. The owner will rebuild and will be in the market for new machinery.

Theo. Beaudouin, West Broughton, P. Q., who recently lost his sawmill by fire, will rebuild his plant next year. The old boiler, engine and machinery are being repaired.

The latest reports received from Millerton, N. B., stated that there is every possibility of the New Brunswick Pulp and Paper Company rebuilding their mill which was destroyed by fire.

The Albert E. Reed & Company, Bishop's Falls, Nfld., are understood to be working on plans for the erection of a large plant to manufacture wood pulp, lumber, artificial fertilizers, and cement.

Z. Charbonneau, 3691 Alice Street, Montreal, P. Q., whose sash and door factory was recently destroyed by fire, will rebuild the plant. The building will be two storeys, 65 x 40, and to cost $2,500.

The lumber mills and box factory at Milton, N. S., which lately came under the control of the McLeod Pulp Company, were destroyed by fire recently. The loss is $20,000, with partial insurance.

P. H. Renaud, Agnes St., Lake Megantic, P. Q., is preparing plans for the erection of a pulp mill the equipment of which will include 5 barkers, cutting-off saw, chains, 70 h.p. engine, Dutch oven and stack.

Auger and Son Limited have been incorporated, with head office at Quebec, P. Q., and capital stock of $100,000, to carry on business as merchants, manufacturers and dealers in lumber. Those interested include A. J. Auger and A. G. Auger, both of Quebec.

Gilmour and Hughson, Hull, P. Q. suffered another loss by fire recently, the damage amounting to $5,000. This is the fifth fire the company has had in the last eight months, the total losses being over $25,000, and they are convinced that all of them have been of incendiary origin.

Practically all of the logs which were carried through the reversible falls at St. John, N. B., recently have been recovered. The logs had formed a raft which had been towed from the Nashwaak booms to the Partington Pulp & Paper Company's mill, Union Point. Near the mill the raft struck a small island and was broken up in the current and upwards of 5,000 logs were carried into the harbor.

Excellent progress is being made with the Laurentide Company's extensions at Grand Mere, P. Q. The new power house and the new ground wood buildings are up, and it is expected that by the end of the year the company will be using part of the new power that is being developed. A large part of the old pulp and paper plant has been operated by hydraulic power, and wiring is now being put in to convert this to electric motive

power. Between 800 and 1,000 men have been engaged this summer on the extension work, chiefly the construction of the 90,000 horse power plant. The power development was well advanced last year, when the war broke out, but operations were temporarily suspended in the autumn, and resumed again in the spring.

The mills at Nelson, N. B., are busy night and day. The John O'Brien mill, and the Flett mill, now being operated by Wm. Sullivan, both have day and night crews sawing, but owing to the high freight rates both these mills are piled up with lumber, nothing to speak of having yet been shipped. Over four million of laths and three million of sawn lumber have already been manufactured this season at the O'Brien mill.

Reports from Chicoutimi, P. Q., state that forest fires have swept through the limits of the St. Simeon Lumber Company, where lumbering operations have been going on actively since the month of April. Some 200 men were employed and about 60 horses. The men and horses were saved with difficulty while the camps and provisions were destroyed. The fire also communicated with the limits of Price Bros., Ltd., causing, it is reported, a great deal of damage.

The Newfoundland Products Corporation, whose incorporation was recently reported, have secured certain water power concessions from the Newfoundland Government. The Reid Newfoundland Company are largely interested in the new corporation. Among the corporation's present plans is one for the construction of pulp mills which will consume 100,000 cords a year. Over 36,000 tons of the highest grade of bleached sulphite pulp will be produced annually. The corporation will spend $18,000,000 in its various undertakings.

The York and Sunbury Milling Company recently completed the rafting at the mouth of the Pokiok of its drive of logs on that stream for the present year. Over six and one-half million feet of logs have been been handled and sorted by the company's crews, a proportion of the logs being retained for manufacture at the Pokiok mill, but the greater quantity was sluiced into the St. John river and there rafted for towing to the company's mill at Gibson. The rafting crew, consisting of from twelve to fifteen men rafted on an average from seventy-five to eighty joints of logs a day.

Western Canada

The Lawson Lumber Company, Ltd., Oak Lake, Man., has been incorporated.

The Aberdeen Lumber Company, Limited, Aberdeen, Sask., has been incorporated with capital stock of $30,000.

Lang and Rodd, shingle manufacturers, Rosedale, B. C., recently suffered a loss by fire, the damage amounting to about $4,000.

The Sardis Shingle Company, Limited, has been incorporated, with head office at Vancouver, B. C., and capital stock of $10,000.

The Ohio Lumber Co., which has been incorporated with a capital of $300,000, has taken over the licenses of the L. E. Ewing on Quatsino Sound, B. C.

The mill of the Edgewood Lumber Company, Greenwood, B. C., is now reported to be running full capacity and cutting an average of 70,000 feet per day.

A fire occurred recently at Phillips' sawmill, Burnaby, B. C., which destroyed the mill buildings causing loss estimated at about $500 on the mill and machinery.

The Crescent Valley Lumber Company has been incorporated, with head office at Vancouver, B. C., and capital stock of $25,000 to engage in the purchase and sale of lumber.

The Timberland Lumber Co., New Westminster, B. C., has added a large block of old growth timber to its holdings in the lower Fraser valley. It will extend its logging railway to the top of the new limit.

The Canadian Paper Sales Company, Limited, Toronto, Ont., have been incorporated with capital stock of $100,000. Their powers include the manufacture of lumber, ties, etc. Those interested are F. H. Anson, V. E. Mitchell, Charles M. Holt and others.

An arrangement is reported for the immediate sale of the plant of the Ocean Falls Pulp Company, Ocean Falls, B. C., to Fleishhacker Bros., and Johnson of San Francisco. It is stated that the new owners will rebuild the mill and double its capacity.

The Keystone Logging and Mercantile Company, Limited, has been incorporated with head office at Silverdale, B.C., and capital stock of $10,000, to take over the business of the firm of H. C. Watkins, and to carry on a general lumber manufacturing and dealing business.

The Craig-Taylor Lumber Company, Bradner, B. C., have commenced operations at their mill. They have many large orders ahead for the Prairie Provinces. The capacity of the mill is 50,000 feet per day. It is equipped with the latest machinery and the company have a standard gauge logging railroad running from the woods to their mill.

The Prince Albert Lumber Company, Prince Albert, Sask., is now running its mill on a double shift, day and night. The mill was recently shut down for a short time on account of the flood. This step has been taken by the company in order to comply with petitions from the mayor and the provincial government so as to relieve unemployment in the district.

Sealed tenders are being received by the Minister of Lands of British Columbia up to the 23rd day of August, for the purchase of License X444, to cut 2,404,000 feet of Douglas fir, cedar, hemlock, and balsam on an area adjoining S. T. L. 37342, Britain River, Princess Royal Beach, New Westminster District. Two years will be allowed for the removal of the timber.

The two and a half mile standard track has been completed at Collins & Phillips' mill at Beaver River, B. C., and the logs handled by the B. C. E. R. from Rand to Beaver River hereafter will be brought out by the new logging road. At Newton station the Trethewey Logging Company are assembling a crew of fifty men preparatory to getting out some big timber at this place for the Brunette Mill Company of New Westminster. At Kings station a good sized camp has sprung up recently and all along the Fraser Valley, from Newton to Abbotsford, a distance of about 35 miles, the mills are now running at full blast, while numerous logging railroad tracks cross the Fraser Valley line of the B. C. E. R. The large Kettle Valley order, having been distributed among the mills throughout the Valley, is to a large extent responsible for this activity in the logging and sawing line.

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Dressed as Required, Spruce and Pine—1914 cut.

Merchantable 1 x 4 x 10/13
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1,000,000 pieces Mill Run Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

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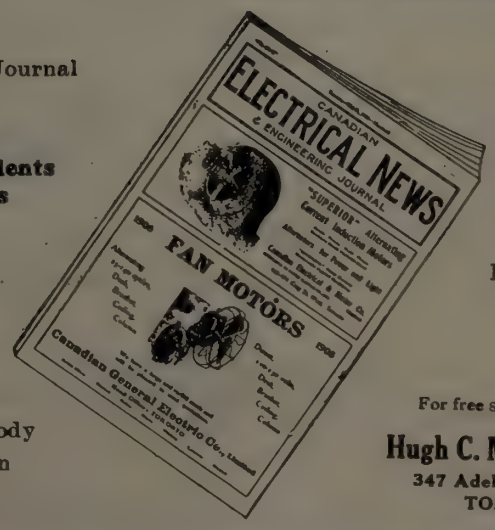

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Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Deputy Minister.

Department of the Interior, Ottawa,
December 20th, 1912.

For Cutting Pulp Wood

The **Ryther Multiple Saw Slasher** will cut 1,000 logs and over per hour into absolutely Uniform Lengths — Highest Possible Efficiency — Lowest Cutting Costs, per Cord — Minimum Maintenance and Repair.

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Bayless Pulp & Paper Company, Ste. Anne, P.Q.
Anglo-Newfoundland Development Co., Newfoundland.
Albert E. Reed & Company, Newfoundland, Limited.
Price Brothers Company, Kenogami, P.Q.
Chicoutimi Pulp Company, Chicoutimi, P.Q.
Baie St. Paul Lumber Company, Baie St. Paul, P. Q.

Ryther & Pringle Company, Carthage, N.Y.

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Payette's Famous Patent Mill Dogs
650 Sets already sold

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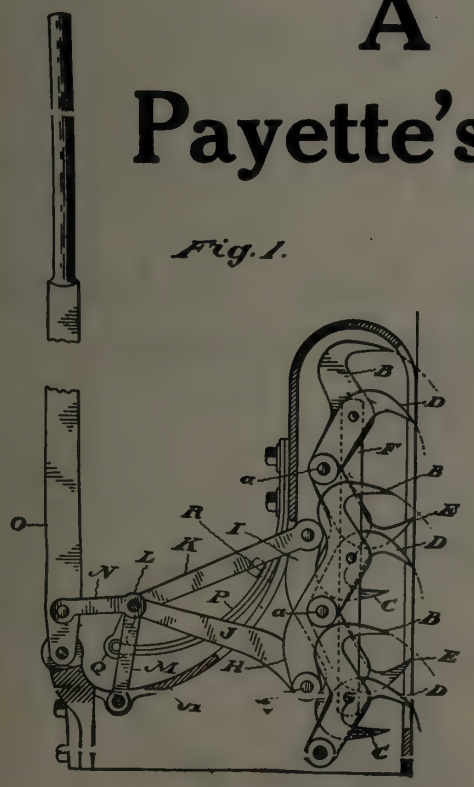

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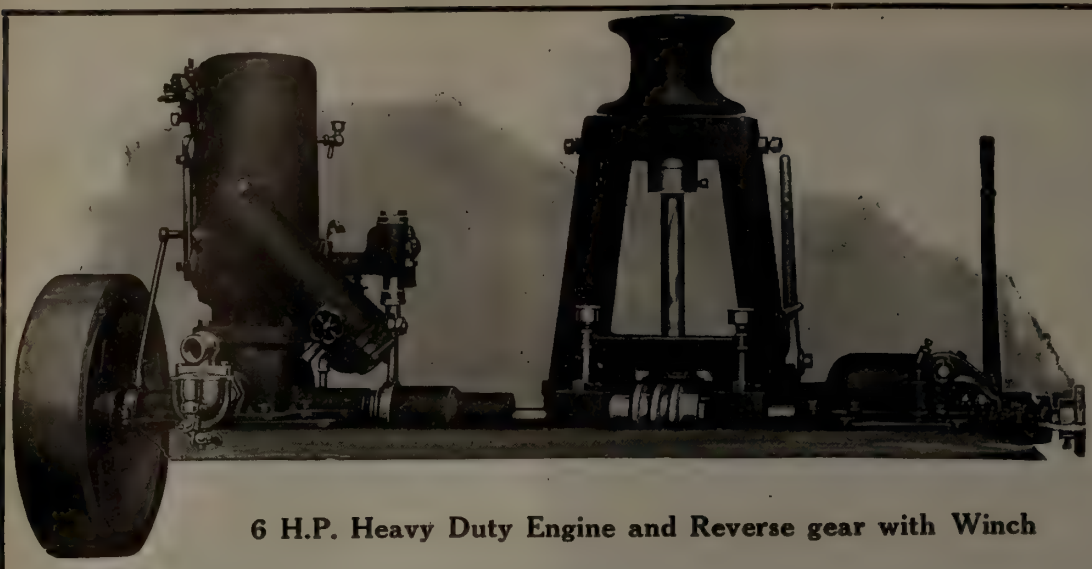

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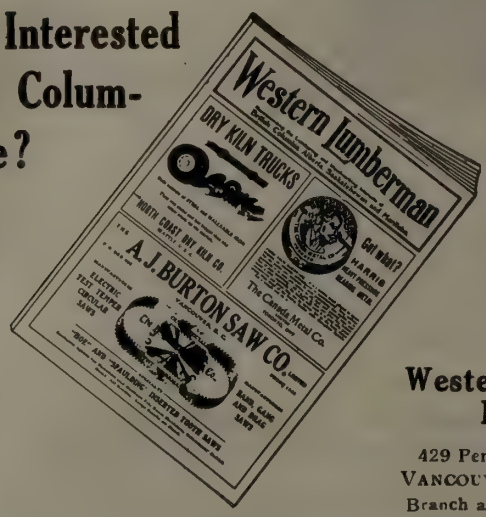

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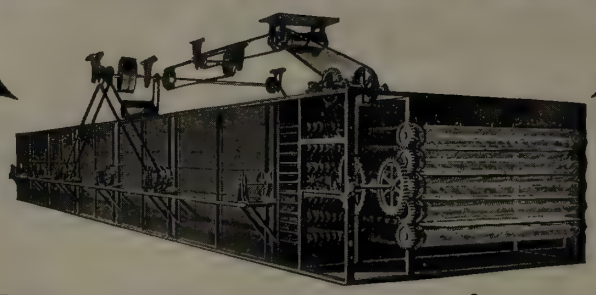

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"Wilson Bros." stamped on every piece of this flooring stands for Quality. Look for the name. Hardwood and Pine. **Interior Finish of All Kinds.** Also Hardwood Veneer Doors to detail. We are equipped to fill large or small orders on short notice. Write us for prices.

Wilson Bros., Limited - Collingwood, Ont.

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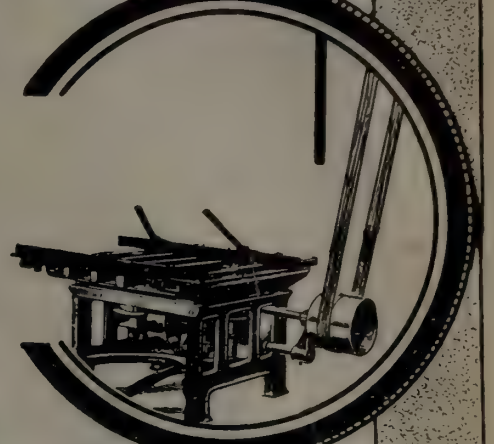

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Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:		
1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 06
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00
Hemlock No. 1:		
1 x 4 and 5-in. x 9 to 16 ft.		17 00
1 x 6-in. x 9 to 16 ft.		20 00
1 x 8-in. x 9 to 16 ft.		21 00
1 x 10 and 12 in. x 9 to 16 ft.		22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.		19 00
1-in. No. 2, 6-ft. to 16-ft.		16 00
2 x 4 to 12, 10 and 16 ft.		19 00
2 x 4 to 12-in., 12 and 14 ft.		19 00
2 x 4 to 12-in., 18 ft.		22 00
2 x 4 to 12-in., 20 ft.		24 00
2 x 4 to 12-in., 22 ft.		25 00
2 x 4 to 12-in., 24 ft.		26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.		16 00
Clear in B. C. cedar, kiln dried		50 00
Douglas Fir:		
Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.		31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.		32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.		32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.		33 00
10x20, up to 32 ft.		33 50
6x18, 8x18, up to 32 ft.		34 00
6x20, 8x20, up to 32 ft.		35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain		35 00
No. 1 and 2 cedar 1-in. Fir rough		38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough		40 00
1½-in. No. 1 4-ft. pine lath		5 00
1½-in. No. 2 4-ft. lath		4 75
1½-in. 32-in. pine		2 65
1½-in. No. 1 4-ft. hemlock lath		4 00
1½-in. mill run hemlock lath		3 75
XX B. C. cedar shingles		2 25
XXX 6 butts to 2-in.		2 90
XXXX 6 to 23-16-in.		3 10
XXXXX		3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4.	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4.	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood. 4/4, No. 2 com. and bet.	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm. 1sts and 2nds, 6/4 x 8/4.	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/.	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4.	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No.. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in..	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards: 1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run: mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce: 1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 30 to 35 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E. 6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed)	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 60)

28 "Service" Branches Throughout Canada

Canadian Consolidated Rubber Co., Limited

Montreal, P. Q.

"STABILITY"

No matter how extensive your rubber goods requirements may be, we have an unrivalled experience, unequalled resources, and the financial stability to handle your order with maximum efficiency.

And, furthermore, what is equally true—no order is too small to warrant our prompt and careful attention.

Our line-up is complete, our quality is unexcelled, and our prices are right. Let us show you what we can do.

It is our desire to serve you.

Canadian Consolidated Rubber Co., Limited

Montreal, P. Q.

28 "Service" Branches Throughout Canada

We make a Specialty of

Conveyor Chains

For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

For Lumbermen and Woodworkers

In every lumber camp "Asbestol" is the favorite, because "Asbestol" gloves and mittens are made for the hardest kind of service. They are guaranteed to stand all reasonable tests of heat, steam and water.

When you buy work gloves be sure you find this diamond-shaped trade mark:

ASBESTOL
REG. IN U.S. PAT. OFF

EISENDRATH'S
CELEBRATED
HORSE HIDE

—our guaranty that the goods are worth the money.

DEALERS—"Asbestol" gloves and mittens are sold through the better wholesale houses. Your wholesaler carries "Asbestol." Call on him to-day for an introductory stock.

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	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

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4/4	40 - 42	26 - 28	14 - 16
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4/4	34 - 36	22 - 24	16 - 18
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4/4	34 - 36	23 - 25	14 - 16
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4/4	32 - 34	23 - 25	15 - 17
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4/4	50 - 52	31 - 33	19 - 21
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No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
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No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
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Spruce, 8 in. and under dimen.	22 50	23 00
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2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	20 00	21 00

All other random lengths, 7-in. and under, 10 ft. and up		20 00
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1½-in. spruce laths		4 10
1½-in. spruce laths	3 65	3 75

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Extras	3 25	3 40
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Your men will appreciate the high quality of our cereals. **Most important is the fact that men who are well fed can give much better service**

PATRONIZE CANADIAN INDUSTRIES

Canadian Cereal and Flour Mills, Limited

Royal Bank Building, TORONTO, ONT.

Veneer Coe Machinery

Automatic Knife Grinder

The Coe Knife Grinder was designed for the finest grinding and most exacting service. It is built on new lines and has completely overcome the objections to other grinders.

The knife is held rigidly while the stone travels back and forth There is no chance for vibration, consequently no unevenly ground knives. Entirley automatic in action no ropes or chains. All moving parts operated by cut steel gears, noiseless in operation. Will grind straight or hollow bevel. Feeds 1-1,000″ to 4-1,000″ for each travel of the stone. Very heavy and compact, occupying small floor space. Made in seven sizes, to grind up to 168 inches.

It is fully described in our catalog which we will be glad to send to interested parties.

The Coe Manufacturing Co.

PAINESVILLE, OHIO, U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer equipment in the world.

The Mark *of Quality*

Saw Mill men know just what working conditions saw mill machinery is up against.

The cuts on this page show two details, embodied in large saw mill machinery, which saw mill men appreciate.

Enclosed Rachet Set Works

Steel Carriage Knee

If you are selecting machinery, why not let us show you how we have met the condition that **you** find particularly difficult — how we stand in the competition for quality?

The E. Long Manufacturing Co., Limited

Orillia, Canada

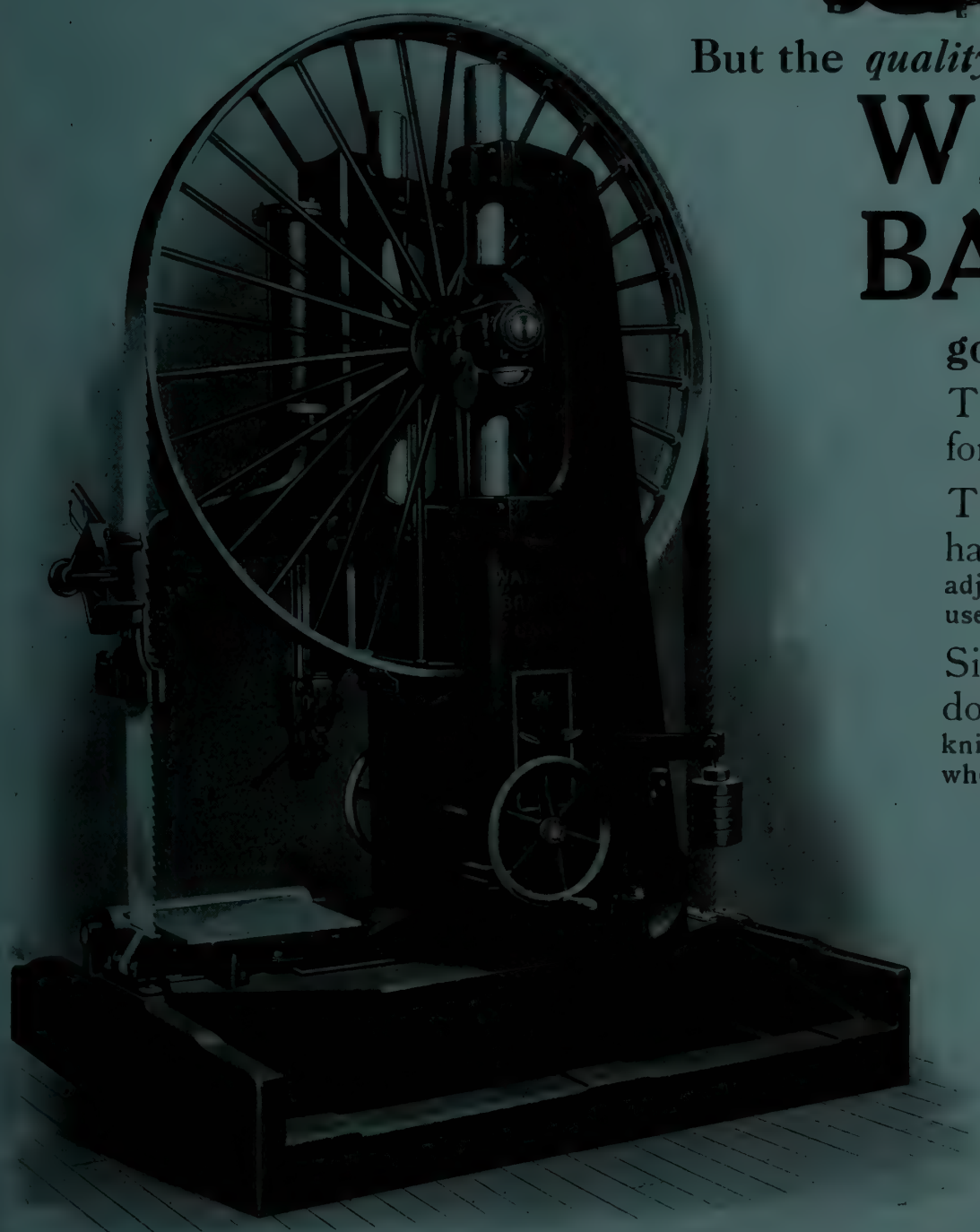
Agencies: **MONTREAL**—Williams & Wilson, Ltd. **EDMONTON and CALGARY**—Gorman, Clancey & Grindley Ltd.
WINNIPEG—Stuart Machinery Co., Ltd. **VANCOUVER**—Robert Hamilton & Co.

Quality That Goes Below the Surface

SIZE up the Waterous Bandmill and it ***looks good.***

Involuntarily you sense strength in the massive build and set of the columns; there's the appeal of nice engineering in the sensible construction of the upper bearings.

You can't overlook the steam raising device for upper guide, nor the practical design of the guides themselves.



But the *quality* of

WATEROUS BANDMILLS

goes *deeper* than that

Take the bed and lower hangers, for instance.

Their unusual strength, their mechanical correctness, their ease of adjustment are all quality features that only use makes apparent.

Similarly, the columns hide the double spring cushioned, double knife edged tension device, the roller bearing wheel raising mechanism and the ingenious arrangement for wheel tilting. They do not appear on the surface either.

A ***real*** inspection will show all these quality features.

Let us send you a catalog that describes and illustrates them fully. And a list of mills in your neighborhood where you can see the Waterous Bandmill at work. The sawyer can show you its good points far better than we can describe them, and he'll be glad to do it.

Every user a "booster."
Prove it for yourself.

The Waterous Engine Works Co.
Limited
Brantford, Canada

H. B. Gilmour
Vancouver, B.C.

Branch
Winnipeg, Man.

$5,000,000.00

worth of mixed metal sold annually.

"FROST KING" METAL

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. **Price 30c per lb.**, Fort William and East; West of Fort William **35c per lb.**, delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, **40c per lb.**; West of Fort William, **45c**, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

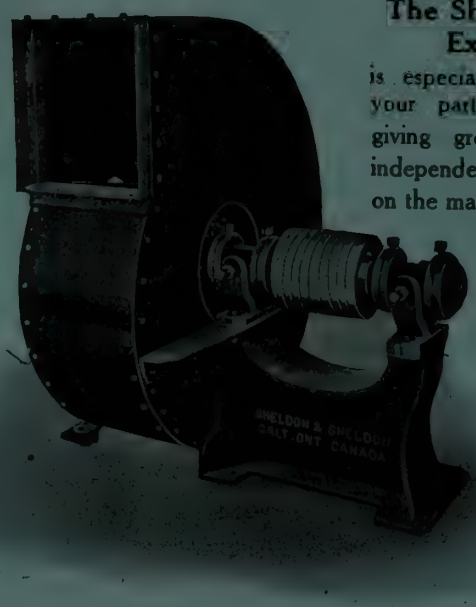
HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

Planing Mill Improvements

Every Manufacturer in the Lumber Industry realizes that to be "up-to-date" their Factory should be installed with **Shaving Exhaust Fans.**



The Sheldon Shaving Exhaust Fan

is especially designed to suit your particular requirements, giving greater efficiency and independence than any other on the market.

See our New Catalogue

Sheldons Limited - Galt, Ontario

Toronto Office, 609 Kent Building

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Messrs. Gorman, Clancey & Grindley, Ltd., Calgary and Edmonton, Alta.

Messrs. Robt. Hamilton & Co. Ltd., Bank of Ottawa Bldg., Vancouver, B.C.

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co. Limited

General Mill Supplies MONTREAL

Your Lumber Jack Will Do Better Work

if he sleeps on a clean, comfortable bed.

The Alaska Double Deck Bunks

are clean, comfortable, cheap and everlasting.

Write for prices.

The Alaska Feather & Down Co., Limited, Montreal

Largest manufacturers of Beds and Bedding in the British Empire.

Canada Lumberman & Wood Worker

New **RAILS** Relaying
12 to 80 pounds per yard.
LOGGING CARS
Jno. J. Gartshore
58 Front St. West, Toronto

Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.

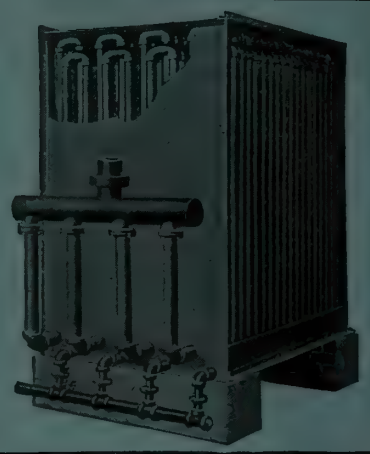
You can dry and cure lumber better in three weeks by using

Canadian Dry Kiln Apparatus
with Humidity Control

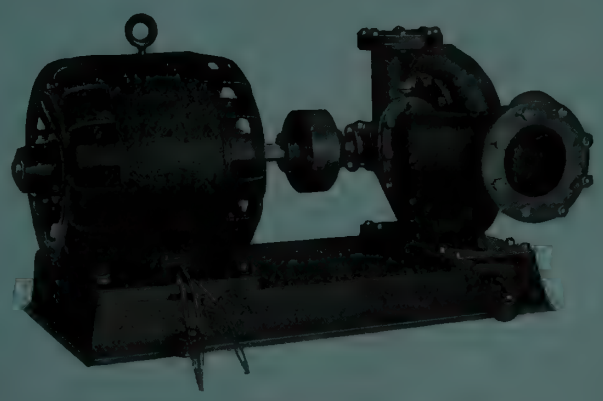
than if it were air dried for 2 years. And your lumber will not warp or check, or be subject to severe expansion and contraction.

Write Dept. 17 for further particulars.

Canadian Blower and Forge Co., Limited
BERLIN, ONTARIO
St John Montreal Toronto Winnipeg Vancouver



"TOWER"
HAIR BELTING
Woven from Camel's Hair Yarn
Manufactured and guaranteed by
Turner Bros. Canada, Limited
MONTREAL



Pump Troubles

If you are not getting the results you want, let us know the conditions and requirements.

We Can Help You

The Smart-Turner Machine Co., Limited, - Hamilton, Canada

Lumber Measuring Register

The Morrison Lumber Measuring Register is an instrument that should be placed on all planers, matchers, moulders, etc. It gives an accurate account of the amount of lumber passing through the machine. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

WRITE FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO
SEE THIS REGISTER AT OUR EXHIBIT AT THE TORONTO EXHIBITION

Alphabetical Index of Advertisers, Page 62 Classified Directory to Advertisements, Page 52

Get The Most Out Of Your Machines and Men

with

"AMPHIBIA"

Waterproof Leather Belting

If the power generated in your plant is being transmitted practically without loss to your various machines you are getting the most out of those machines and men and your plant is operating at maximum efficiency. The one belt that will promote these conditions in a saw or planing mill is "AMPHIBIA".

This belting is made from selected hides that are given a secret waterproof tanning. The best of the butt is then selected for "AMPHIBIA" belting—all weak spots are culled out by experienced men.

The manufacture of "AMPHIBIA" belting is carried on with extreme care and rigid inspection. Every joint is made firm as the leather itself. The finish on "AMPHIBIA" is one that makes the belting grip the pulley and prevent slipping.

"Leather like gold has no substitute."

Write us for a sample order and state where belt is to run.

Write To-day

Made in Canada

"AMPHIBIA"

Sadler & Haworth

Tanners and Manufacturers of Leather Belts for 39 years.

"AMPHIBIA"

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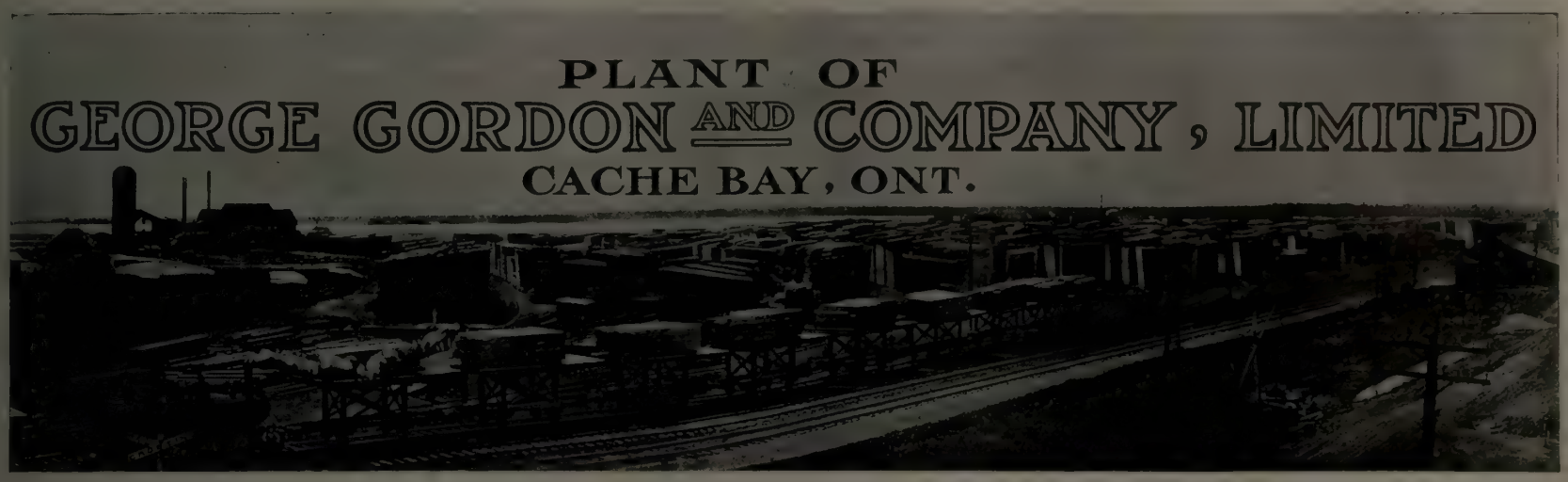
511 William St.

TORONTO
38 Wellington St. E.

WINNIPEG
Galt Building

ST. JOHN
149 Prince William St.

VANCOUVER
107-111 Water St.



Bird's-eye view of Mills and Lumber Yards

The mill which appears above was burned on July 19th. Our other mill is still running day and night. Our planing mill and yards are intact.

White and Norway Pine

CONTINUE TO SEND US YOUR INQUIRIES FOR DIMENSION TIMBER, DEALS, ROUGH AND DRESSED LUMBER IN ALL SIZES AND GRADES.

George Gordon & Co.

Limited

CACHE BAY, ONTARIO

Mason, Gordon & Co. 80 St. Francois Xavier Street, Montreal, Que.

Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - **Western Office:—Pacific Building, VANCOUVER, B. C.**

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock— heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont.

JOHN DONOGH & CO.

Wholesale Dealers
Are looking for buyers
—Special—
1 x 4 & 5 White Pine common and dressing 1913 cut

Dry Hemlock and Spruce all sizes

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P. & J. SHANNON

Manufacturers of

White and Norway Pine Lumber Lath, Etc.

Inquiries solicited for 1915 cut. Mill and equipment new in 1914.

Head Office and Mill:—**Biscotasing, Ont.**

MILL RUN SPRUCE

For Immediate Shipment

38,000 feet 2 x 4 — 10 — 16
48,000 feet 2 x 6 — 12 — 16
60,000 feet 2 x 8 — 12 — 16
40,000 feet 2 x 10 — 12 — 16
15,000 feet 2 x 12 — 12 — 16
40,000 feet 1 x 6 and 7
30,000 feet 1 x 8
30,000 feet 1 x 9 and wider

PILING

We always have on hand a full line of Spruce and Tamarac Piles, 25 to 50 feet in length.

ARTHUR N. DUDLEY
Lumber, Lath and Shingles
109 Stair Building, Toronto **Phone M. 6368**

JOHN GILLIES, President — DAVID GILLIES, Vice-President — J. S. GILLIES, Sec-Treas.

Established 1873

GILLIES BROS.

Limited

Mills and Head Office **BRAESIDE, ONT.**

Manufacturers of

WHITE PINE

RED PINE **SPRUCE**

New York City: Guy E. Robinson, 1123 Broadway

Ammunition Boxes

100,000 ft. 1 x 4 10/16 No. 1 Spruce
50,000 ft. 1 x 5 " "
30,000 ft. 1 x 6 " "
150,000 ft. 1 x 8¼ and up No. 1 Com. Birch

Hemlock

400,000 ft. No. 1. Hemlock Cache Bay Bone dry
2,000,000 ft. " Longford 1915 Cut

Send us your inquiries.

The Long Lumber Company

HAMILTON, ONT.

You Won't Be Scared At Our Prices

Hocken's Hemlock

Same Good Quality, Prompt Shipment and Normal Price.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

Watson & Todd Limited

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Dry White Pine and Norway

OTTAWA

Also

Montreal and Liverpool, Eng.

The

Harris Tie & Timber Co.

Ottawa - Canada

Lumber - Lath - Shingles

Cedar Poles and Posts

Railway Ties - - Piles

The

Georgian Bay Lumber Co.

Limited

Waubaushene, Ontario

Manufacturers of High Grade

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Wholesale Lumber Dealers and Selling Agents for

Fraser & Co.

Mills at

DESCHENES - - - QUEBEC

White Pine
Red Pine
Spruce
Lumber and Lath

River Ouelle Pulp & Lumber Co.

Manufacturers of

SPRUCE

Lumber Lath Pulpwood

Head Office and Mills at:

St. Pacome, Que., Canada

On I. C. Ry. 75 Miles East of Quebec City

Also Mills at:

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On Nat. Transcontinental Ry.

BARTRAM BROTHERS, LIMITED

OTTAWA, CANADA

Spruce - Red Pine - White Pine

Large stock dry 1″ and 2″

Have large stock 3″ Spruce Deals for export trade at water points and can make delivery.

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

WE FEED CANADA'S SOLDIERS

with

KLIM

THE LUMBERMAN'S MILK

In Powder Form

Klim is a daily ration for our men. The Government adopted Klim as the most convenient, purest, cheapest and most nourishing form of milk obtainable for camp use. With the same advantages you can give your men Klim, for use in lumber camp, boarding house or hotel.

One pound of Klim makes one gallon of liquid at 20c. or less.

Write for sample and full information.

Canadian Milk Products Ltd., Toronto

Plants:—Belmont, Ont., Brownsville, Ont. **Head Office:—Mail Building**

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

FIR TIMBERS

HIGH GRADE RED CEDAR SHINGLES

LET US QUOTE YOU PRICES

TIMMS, PHILLIPS & CO., LTD.

Yorkshire Building, VANCOUVER, B. C.

The Glue Book

What it Contains:

Chapter 1—Historical Notes.
Chapter 2—Manufacture of Glue.
Chapter 3—Testing and Grading.
Chapter 4—Methods in the Glue Room.
Chapter 5—Glue Room Equipment.
Chapter 6—Selection of Glue.

Price 50 cents

Canada Lumberman & Woodworker

347 Adelaide St. West, Toronto

Heavy Fir Dimension

Is Our Particular Specialty

The Heavier it is the Better we like it

We Dress from 1 to 4 Sides up to 16-in. x 20-in., 60-ft.

Our grade is posstively right, and prices will please

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Mills at Craigs on the B.C.E.R.

Shipment by C.P.R.R., G.N.R.R. or B.C.E.R.R.

Thurston-Flavelle Lumber Company

MANUFACTURERS OF

British Columbia Red Cedar Exclusively

4, 5 and 6 inch "CLEAR A" Cedar Bevel Siding.
8, 10 and 12 inch CLEAR CEDAR FINISH.
EXTRA XXX RED CEDAR SHINGLES.

Eastern Agents, Gull River Lumber Co., Ltd., Lindsay, Ont.

Head Office and Mills, Port Moody, B.C.

Eastern Canada White Cedar Shingles

Close delivered prices will now be quoted to all points in Ontario for immediate shipment in all grades.

Either Short Count Standard or Full Count supplied as required.

This stock is bone dry and ready for quick delivery.

Special: A special price will be made this month on

CLEAR WALLS and Extra No. 1s.

to reduce stocks.

All Stock manufactured on our Standard Grading Rules which assures uniform high class Shingles.

The North Shore Shingle Association

of Eastern Canada

Write or wire for quotations.

F. G. WHEATON, Amherst, N.S.

Canadian Sales Agent

JOHN McKERGOW, President — W. K. GRAFFTEY, Managing-Director

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CHRISTY-MOIR CO.
149 Broadway, New York City

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13 Foot **SPRUCE** 16 Foot
Lath and White Cedar Shingles

Sales Agents: Iberville Lumber Co.
Sault-au-Mouton, P.Q.

James P. Grant — John K. Campbell

Grant & Campbell

Manufacturers of
SPRUCE, HEMLOCK TIMBERS AND PILING AND LATH

Prices promptly given on all enquiries.

New Glasgow, N.S.

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HARDWOOD LUMBER
Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
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JOHN P. NEWMAN Wiarton, Ont.

HAEBERLE LUMBER CO.
LUMBER AND TIMBER
White Pine, Norway, Yellow Pine, Hemlock
Oak Mouldings, Doors, Sashes and Blinds, Cedar Poles and Ties.
Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
NIAGARA FALLS, N.Y.

Hardwood Flooring
The Celebrated Diamond Brand
End Matched, Bored, Polished and Bundled
Manufactured by
SIEMON BROS., LTD.
For prices write
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Good Grades — **Right Prices** — **Prompt Shipments**

Canadian Hardwood. National Grading Rules

Birch
Basswood
Maple
Elm
Beech
All Thicknesses

Also full line in

White, Red
and
Jack Pine
All grades and sizes.

Get in touch with us for prices

C. G. Anderson Lumber Company, Limited

Manufacturers and Strictly Wholesale Dealers in Lumber

206 Manning Chambers
Toronto

WE Buy, Sell and deal in all kinds of Lumber and Timber in Canada and United States: Spruce, White Pine, White and Basswood, Ash, Cedar, Douglas Fir, Beech, Birch, Walnut, Cherry, Chestnut, Cottonwood, Hemlock, Maple, Norway Pine, Short and Long Leaf Yellow Pine, Oak, Redwood, Birch, Maple and Oak Flooring, Pulpwood Ties, and Cedar Poles.

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QUEBEC

The Canada Wood Specialty Co., Limited
Manufacturers:
Lumber, Hardwood Flooring, Handles, Poles, Bed Frame Stock, Cheese Box Hoops, Heading, Baskets, Etc.
Write, Telegraph or Telephone your orders
Orillia, Ont.

R. LAIDLAW LUMBER CO.
LIMITED
Toronto
Sarnia
Buffalo

SPECIALTIES
Sawed Hemlock
Red Cedar Shingles
White Pine Lath
Bass and Poplar Siding

James Gillespie

Pine and Hardwood
Lumber
Lath and Shingles

North Tonawanda, N.Y.

It Just Depends
Advertising and Dynamite are both useful, but the results of each depend upon how it is handled.
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Toronto, Montreal, Winnipeg, Vancouver, London, England.

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TIMBER Estimates, Topographic and Boundary Surveys, Planting, Logging Maps, Portable Mill Operations.

Technical Training Thoroughness
Experience

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The Penetanguishene Planing Mill Sash and Door Factory

Planing of all kinds done by carload. Railroad Switch in connection with mill. All classes of building material, lime and cement for sale.

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PENETANGUISHENE, ONTARIO

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J. J. MURPHY & CO.

LUMBER and TIMBER

Spruce, Hemlock, Pine and Hardwoods

Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.

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Do you know the worth of your Timber Lands?

My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,

Whether you want to buy, bond or sell I can be of service to you.

F. R. MEIER
Consulting Forester
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Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna. Forest Commission, etc.

"Well Bought is Half Sold"

"A Column on Lath"

200 M 1½"—4' No. 1 W. P. Lath
200 M 1½"—32" Nos. 1 & 2 W. P. Lath
200 M 1½"—36" Nos. 1 & 2 W. P. Lath
900 M 1½"—4' No. 1 Hemlock Lath
275 M 1½"—4' No. 2 Hemlock Lath
300 M 1½"—32" Nos. 1 & 2 Hemlock Lath

1915 Cut, at Byng Inlet.

2 cars 1½"—4' Merch. Spruce Lath

1914 Cut, at Gravenhurst.

5 cars 1⅜"—4' Nos. 1 & 2 Red Pine Lath

1914 cut, at Rockland.

2 cars 1½"—4' Nos. 1 & 2 White Pine Lath
3 cars 1½"—4' No. 3 White Pine Lath

1915 cut, at Waubaushene.

Write us for prices.

ALL ARE CHOICE LOTS.

Graves, Bigwood & Co.

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1026-32 Traders Bank Bldg, Toronto, Ont.

Mills: Byng Inlet, Ont.

We are Buyers of

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Pine and Spruce
Veneers (3 or more ply) Handles (all descriptions)

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Hydraulic and Screw
for
VENEER
VENEER DRYERS
PULP

Special machinery made to order

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Phone 2718

are prepared to examine and report on forest properties anywhere. Forest surveys, Logging maps, Timber estimates, Water Power, Water Storage, Topographical plans, Water supplies, Park Works, General plans for village sites and Private Estates. Railroad location and construction. Roads and Rivers improvements. Good information concerning Quebec Timber and Mining lands, cheerfully given.

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Wholesale

Red Pine White Pine Spruce

ESTABLISHED 1855

THE McGIBBON LUMBER CO.

OF PENETANGUISHENE

Manufacturers of and Dealers in

Lumber, Lath, Shingles, Etc.

HEMLOCK BILLSTUFF a Specialty of which we have the Best Assortment on Georgian Bay.

Don't wait to write. Phone us your requirements.

All stock sized or matched if required.

Our Yards are Unequalled for Drying Lumber

To the Owner of Timber Lands

Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

L. E. Campbell Lumber Company

Cruising and Engineering Department

2234 Dime Bank Bldg. - - DETROIT, MICH.

California White Pine
California Sugar Pine
and Arizona Soft Pine

Best Stock for Factory and Pattern Lumber

Ask **LOUIS WUICHET**

Room 716 Railway Exchange, CHICAGO, ILLINOIS

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Manufacturers of . . . . . **YELLOW PINE LUMBER**

Mills :—
Selma, La.
Jena, La.
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Waukegan, Tex.
Buena Vista, Ark.

Long Leaf Timbers,
Short Leaf Finish
and
Railroad Material

Send your inquiries and orders to :—

General Sales Office

Suite, 1220 Chemical Building, ST. LOUIS, Mo.

F. N. WALDIE, President. R. S. WALDIE, Vice-President. W. E. HARPER, Secretary.

The Victoria Harbor Lumber Co., Ltd.

Manufacturers of

Lumber, Lath and Shingles

Mills at Victoria Harbor, Ont.

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Mills: Charlemagne, Montcalm, St. Adele

The Gres Falls Company
Mills: Three Rivers and Cape Madelaine

St. Gabriel Lumber Co., Limited
Mill: St. Gabriel de Brandon
Head Office: 524 Board of Trade, Montreal, P. Q.

Manufacturers of
Spruce and Pine Lumber and Ground Wood Pulp

We handle
Everything in Lumber

Write or wire for prices and stock lists.

The McLennan Lumber Co.
Limited
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HOE

Chisel Tooth Saws

The Choice of Lumbermen in two Hemispheres

More than 80,000 of these saws are now in use in all parts of the world. Hoe Chisel Tooth Saws are backed by 86 years' experience in the manufacture of saws. They are made from the finest steel, evenly tempered throughout. Special Flanged Shanks and Superior Bits are supplied for sawing hardwood.

We are the oldest Saw manufacturers in America

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Edward Partington Pulp & Paper Co.
Limited

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Mills: St. John, N.B. Blackville, N.B. Nanudogan, N.B. Marysville, N.B.

Manufacturers of—

Bleached Sulphite Pulp

Spruce, Pine and Hemlock Lumber, Laths, Hardwoods

The C. Beck Manufacturing Co., Limited

PENETANGUISHENE, ONT.

U. R. YY.

If you buy some of the following for your trade, for ***"WE AIM TO SERVE YOU WITH THE BEST."***

1 car 1 x 7 and wider No. 3 Cuts and Outs.
1 car 1 x 4 and wider Barky Strips and Shop.
50,000 ft. 2 x 6 — 20 Norway.
50,000 ft. 2 x 8 — 20 Norway.
8,000 ft. 2 x 10 — 20 Norway.
12,000 ft. 2 x 12— 20 Norway.
150,000 ft. 1 x 4 to 9 Common.
50,000 ft. 5/4 x 4 to 9 Common.
120,000 ft. 1 x 12 Common.
40,000 ft. 5/4 x 12 Common.
14,000 ft. 2 x 6 — 20 and 22 Norway.
38,000 ft. 2 x 8 — 22 Norway.
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REMEMBER—WE CAN DRESS, MATCH OR RESAW and YOU WILL GET GOOD SERVICE AND SAVE FREIGHT

Keystone No. 2

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Highest Award

Saws, Tools, Files

HIGHEST AWARD SAWS TOOLS FILES DISSTON SAN FRANCISCO PAN-PAC.INT.EXPOSITION

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Our Mills Produce and We Market as Much

GENUINE LOUISIANA RED CYPRESS

As All Other Concerns Combined

CYPRESS DEFIES DECAY

250,000,000 feet constantly in stock insures filling any reasonable order promptly.
Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

Our salaried salesmen receive credit for mail orders. Try us.

CYPRESS "THE WOOD ETERNAL"

LOUISIANA RED CYPRESS COMPANY

Hibernia Building **New Orleans, La.**

Machinery and Timber For Sale

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the Town of Parry Sound, Ont.; and other Lumber Equipment, including boom chains, plows, sleighs, etc.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Automatic Machine for circular saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Wood Machine for 16-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

Also, contents of machine shop, containing Planer, Drill, Lathe and Machinery, with tools necessary for repair work.

All of the above open for inspection at Parry Sound.

The Parry Sound Lumber Co. Limited

26 Ernest Avenue, TORONTO, CANADA

Let Us Quote You On

Your Requirements

of

Rough and Dressed Lumber and Lath

We specialize on cutting to order all sizes of

Dimension Timber

Also in Dressing in car or mixed lots 1", 2" and 3" to customers' specifications.

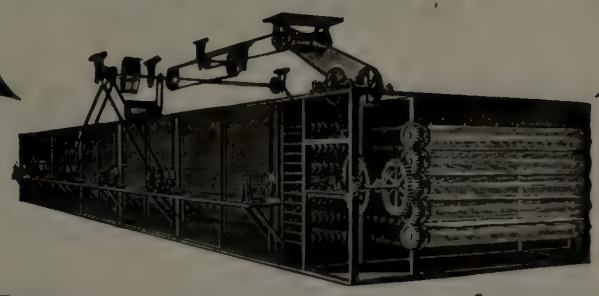
Complete stocks always ready for prompt shipment.

Send your inquiries.

Austin & Nicholson

Chapleau, Ontario

PROCTOR VENEER DRYER

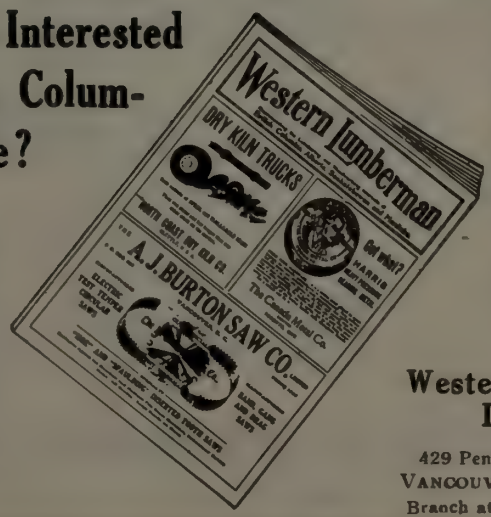


Dries enormous amount of veneer perfectly flat and pliable at minimum cost, without checks or splits

Send for catalog and list of users

The Philadelphia Textile Machinery Co., Philadelphia

Are You Interested in British Columbia Trade?



The immensity of the Lumber Industry will within a few years make this Province the most important in the whole Dominion.

There is undoubtedly a big market for Mill Equipment of all kinds. Let us Demonstrate our Advertising service. We please others, we can please you.

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Branch at Winnipeg

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Hoffman Brothers Company

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Manufacturers of Hardwoods—Any Thickness From

1/30″ SLICE CUT VENEER
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Reg. U.S. Pat. Off. Reg. U.S. Pat. Off.

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QUARTERED WHITE OAK

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Yards at—Nashville, Tenn. Basic, Va.
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We can ship you promptly any of the above Stock, Carefully Inspected

WE WOULD LIKE TO HEAR FROM YOU

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Real Estate Trust Bldg., Philadelphia, Pa.

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Plant of The Stearns Salt and Lumber Co.

Stearns Quality

Michigan Hardwoods
Hemlock and Pine

Lumber and Timber

Try out STEARNS SERVICE on mixed car shipments. Retail stocks replenished over night by our 24 hour service.

HEMLOCK
WHITE PINE
HARDWOODS
MAPLE FL'G.
IN MIXED CARS
SHINGLES
LATH
POSTS
MOULDING

The
Stearns Salt & Lumber Co.
Ludington, Mich.

W. M. RITTER LUMBER COMPANY

Below is List of Dry Lumber We Can Ship Promptly

CHESTNUT:
4/4 1s and 2s, 2 cars.
5/4 1s and 2s, 3 cars.
6/4 1s and 2s, 3 cars.
8/4 1s and 2s, 1 car.
4/4 No. 1 Common, 3 cars.
5/4 No. 1 Common, 1 car.
6/4 No. 1 Common, 2 cars.
8/4 No. 1 Common, 2 cars.
4/4 Sound Wormy, 3 cars.
5/4 Sound Wormy, 2 cars
8/4 Sound Wormy, 1 car.

POPLAR:
5/8 Reg. 1s and 2s, three cars.
3/4 Reg. 1s and 2s, one car.
4/4 Reg. 1s and 2s, four cars.
5/4 Reg. 1s and 2s, one car.
6/4 Reg. 1s and 2s, one car.
10/4 Reg. 1s and 2s, one car.
12/4 Reg. 1s and 2s, two cars.
16/4 Reg. 1s and 2s, three cars
4/4 No. 1 Common, 4 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 2 cars.
5/8 18-23, two cars, Panel and No. 1.
4/4 24-27, three cars, Panel and No. 1.
4/4 18-23, two cars, Panel and No. 1.

BASSWOOD:
4/4 1s and 2s, 5 cars.
5/4 1s and 2s, 3 cars.
4/4 No. 1 Common, 5 cars.
5/4 No. 1 Common, 3 cars.

WHITE OAK:
5/4 1s and 2s Plain, 5 cars.
6/4 1s and 2s Plain, 6 cars.
7/4 1s and 2s Plain, 7 cars.
8/4 1s and 2s Plain, 7 cars.
5/4 No. 1 Common, 3 cars.
6/4 No. 1 Common, 3 cars.
4/4 Qtd. 1s and 2s, 4 cars.
4/4 No. 1 Common, 5 cars.

PLAIN RED OAK:
4/4 1s and 2s, 7 cars.
5/4 1s and 2s, 3 cars.
6/4 1s and 2s, 3 cars.
8/4 1s and 2s, 1 car.
4/4 No. 1 Common, 6 cars.
5/4 No. 1 Common, 2 cars.
8/4 No. 1 Common, 3 cars.

The above is a list of dry stock which we can ship promptly. All our own manufacture and band-sawn stock, and thoroughly dry. Do not place your orders before writing for prices.

CANADIAN REPRESENTATIVE:

John Hall, Box 32, Toronto, Canada

Phone College 6997

W. M. RITTER LUMBER COMPANY — COLUMBUS, OHIO — W. M. RITTER LUMBER COMPANY

DO YOU WANT A LUMBER SALESMAN?

Many a "high-power" lumber salesman has been secured through a little ad in the "Wanted and For Sale" columns of this paper.

You may have other wants which this medium can fill for you. It will cost you little to try. Send your want ads to the

CANADA LUMBERMAN & WOODWORKER, TORONTO, CANADA

Spruce
White Pine
Banksian Pine
Birch

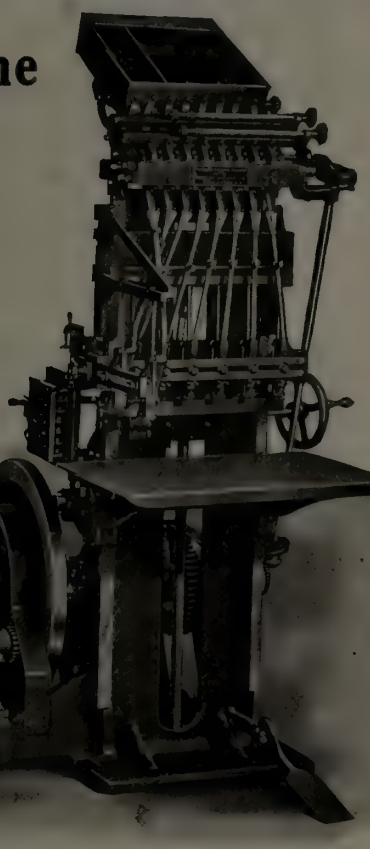
Get our stock list and prices.

—BROWN CORPORATION—

***Formerly:*—Quebec & St. Maurice Industrial Company, Portland, Maine**

Morgan Machine Company

ROCHESTER, N. Y.



Manufacturers of—

Nailing Machines,

Lock Corner Box Machinery,

Box Board Matchers,

Box Board Printing Machines.

Every manufacturer of boxes; every manufacturer who has nails to drive in any article, or packages of any kind to manufacture, should write the Morgan Machine Company for latest developments in machinery for the Box Industry.

Morgan Machine Company
ROCHESTER, N.Y.

Fraser Limited
Fredericton, N. B.

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Cabano, P. Q.

Fraser Lumber Co., Limited
Plaster Rock, N. B.

F & M Lumber Co., Limited
Whitworth, P. Q.

MANUFACTURERS OF

Spruce Lumber
Rough and Finished

Shingles, Lath, Piano Sounding Board Stock, etc.

6 H.P. Heavy Duty Engine and Reverse gear with Winch

River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.

Tested to 20% Over Admiralty Proof.

Hingley's B. B. B. Chains

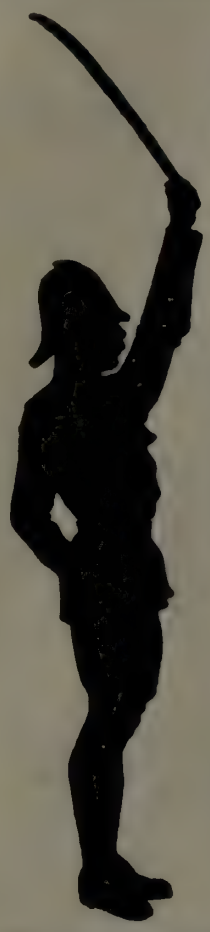
Stocked by all principal jobbers everywhere.

General Agents for Canada
Drummond McCall & Co. Limited
Montreal

Specialties: Boom Chains of all Descriptions, Rafting, Log Loading, Quarry, Mining, Crane and Sling Chains. All hand-made by expert workmen from Hingley's Netherton refined iron.

Agent for New Brunswick and Prince Edward Island
F. R. Whipple,
West St. John, N.B.

N. Hingley & Sons, Limited, Netherton Iron and Chain Works, Dudley, England.



Boake Doors

are

Quality Leaders

Boake Doors are the finest obtainable. They are real quality leaders. Long manufacturing experience and careful buying allow us to offer you a high-grade stock of hardwood interior and front doors in plain and quarter cut oak, birch, pine and fir.

Timber

In rough and dressed Douglas Fir and Yellow Pine timber we have sizes suitable for factory and warehouse construction. Large stocks on hand for prompt shipment.

Write for our catalogue.

The Boake Mfg. Co.
Limited
Toronto, Canada

LINK-BELT
SAW MILL CHAINS

Superior in Design, Workmanship, Quality
High Carbon Steel Pins.
PATTERNS FULL WEIGHT—FULL STRENGTH.

RIVETED MALLEABLE IRON SAW DUST AND REFUSE CHAIN.
Write for Catalogue No. 110-D.

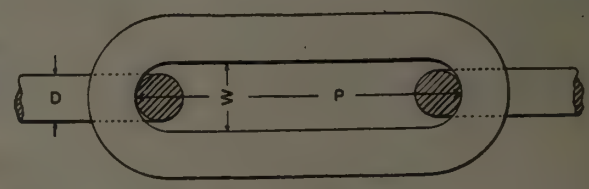
Canadian Link-Belt Company, Ltd.
1189 King Street West, Toronto

Seattle, Link-Belt & Dodge Products Company, 580 First Avenue South.
Portland, Ore., Link-Belt & Dodge Products Co., 14th and Lovejoy Sts.
A. R. Williams Machinery Company, Limited, Vancouver, B. C.
Waterous Engine Works Company, Limited, Brantford, Ont.

Have You Noticed This?

In order to obviate errors and to prevent delays in shipments, we would like to have you carefully note the how of ordering conveyor chain.

You will note that we are taking it for granted that you are using our chain, but as ninety per cent of the lumbermen are, we feel that we are not taking too great a liberty.



Standard Conveyor Chain and Ajax Dredge Chain

are the leaders in their respective fields, and there's a reason—quality, service and dependability.

Standard Chain Company
Pittsburgh

JOHNS-MANVILLE SERVICE
COVERS THE CONTINENT

THIS emblem of J-M Responsibility represents a principle and symbolizes a pledge:—

The principle that every J-M Product shall render Full Service to its purchaser—

A pledge that this principle shall be given force and effect through J-M Service that "covers the continent."

J-M Regal Roofing will still be giving Good Service when Some Other Roofings, that Cost More may be Dried Up, Rotted Out or Blown Away.

The selling points you use to make a sale of J-M Regal Roofing are exactly the points on which you yourself would buy it to roof your own building.

J-M Regal Roofing **lasts**—and that is why it sells! It is the **best** rubber type roofing on the market—but it sells for less than some not as good. When cost of upkeep is considered, it is the **most economical**—that is why it stays sold and sells more.

J-M Regal Roofing is a high-quality wool felt made in our own mills, thoroughly impregnated and heavily coated with Trinidad Lake and other natural asphalts processed and combined to withstand weather effects for an almost indefinite period.

It will retain its life and pliability with fewer paintings than any other ready roofing of its type. It is smooth surfaced and fire-resisting. Easily applied with J-M Patent Roofing Cleats that make seams waterproof without cement.

Sold with J-M Roof Registration Privilege on J-M Responsibility at Prices that mean Profit to You. Write our Nearest Branch for Descriptive Literature, Prices, etc. 8

The Canadian H. W. Johns-Manville Co.
Limited

Toronto Montreal Winnipeg Vancouver

Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

"Maple Leaf" Brand

Stitched Cotton Duck Belting

A trial Belt will convince you. Write for prices and samples.

Excels all others in economy, strength, efficiency and true running, whether for transmission of power or conveying. A test recently made at McGill University, Montreal, of a 6-ply '**Maple Leaf**" belt, a light double leather, and a 6-ply rubber belt, showed that our "**Maple Leaf**" Belt stood a breaking strain 50 per cent. greater than the leather, and 25 per cent. greater than the rubber belt.

"Maple Leaf" Main Drive Belts
Are the Best on the Market.

"Maple Leaf" Belt Dressing is the best for all kinds of belts.

Dominion Belting Co., Limited
HAMILTON - ONTARIO
Branch: Montreal—Office 51 Duluth Building

CAMERON & CO., LIMITED

OTTAWA WHOLESALE CANADA

OAK FIR WHITE PINE

Specialty --- Dimension Timber

HEMLOCK YELLOW PINE NORWAY PINE

Lumber
Lath
Shingles

EASTERN AGENTS
NORTH PACIFIC LUMBER CO., Limited
MILLS AT - - BARNET, B.C.

TIES
POLES
POSTS

C. A. Larkin Lumber Co.
Limited

Wholesale Lumber Merchants

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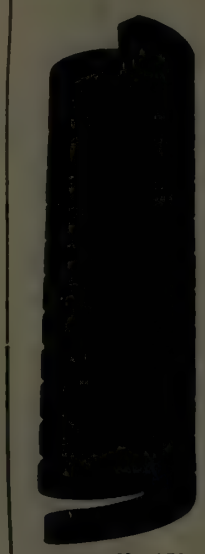
Garlock Packings

Are made in over two hundred styles and combinations to meet every known requirement. We will assume entire responsibility in selecting the proper styles and combinations of our packings to work successfully and economically under any stated condition; and if goods are not wholly satisfactory to purchaser we will refund promptly the cost of same. A card will bring our new catalog which fully describes our various styles of packings.

Style No. 777


Style No. 150

The Garlock Packing Co.
Hamilton, Ontario

Branches: Calgary Montreal

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MANUFACTURING WOODWORKING
Machine Knives, Circular Cutters and Mortise Chisel

PRATT & WHITNEY CO.
OF CANADA, LIMITED

SMALL TOOLS

Taps — Dies — Reamers — Cutters — Drills
MADE IN CANADA
As good as money can buy—Guaranteed absolutely!

Head Office and Works, DUNDAS, ONT.

SALES OFFICES:
MONTREAL Drummond Bldg.
VANCOUVER
WINNIPEG Bank of Hamilton Bldg.

Exposed to Acid Fumes

SINCE July, Nineteen Fourteen, this Spartan Belt has been pumping sulphuric acid fumes from the pickling room at the plant of the Halcomb Steel Company, Syracuse, N.Y.

The corrosion, as seen in the photograph, around the blower, indicates the action of the acid fumes and gives some idea of the unusual service conditions under which the Spartan Belt has operated.

This belt has not only withstood exposure to acid fumes for more than a year, but during that time has operated with absolutely no protection from weather extremes.

Notwithstanding the abnormal service conditions existing, Spartan has given perfect satisfaction, which is pretty convincing evidence that this Belting is impervious to conditions which quickly ruin ordinary belting. Why not Spartan Belting as a solution of your transmission problems?

The Graton & Knight Mfg. Co.

Oak Leather Tanners and Belt Makers

Worcester, Mass., U.S.A.

REPRESENTATIVES IN CANADA

The Canadian Fairbanks-Morse Company, Limited

St. John Toronto Quebec Hamilton Montreal Ottawa Vancouver Victoria

Over two years ago we printed this advertisement and this illustration, and still our bands are being improved—there's nothing that can match them.

WONDERFUL QUALITY
IN
SIMONDS
WIDE BAND SAW

What property is there about a Band Saw that will permit it to tie itself into the Chinese puzzle now illustrated in this picture?

In this case it was the tenacity of the steel.

Tough Simonds Steel.

An ordinary saw blade subjected to the pressure this blade stood while running might have torn to pieces on the wheel or would have been hopelessly cracked when taken off the mill.

But nothing like that with this Simonds Saw; not a crack or break.

Safety of employees requires efficient saws.

Simonds Canada Saw Co., Limited

St. John, N. B. **Montreal, Que.** **Vancouver, B. C.**

"Repairing and Building"

We want every lumberman to write us for a copy of our new booklet. The title is "Repairing and Building" and it tells the whole story of

NEPONSET Paroid Roofing

and other NEPONSET Products.

This book has been issued to get more business for the NEPONSET Dealers—and it is doing it.

Bird & Son,
Dept. L.,
Hamilton, Ont.

Send us your book "Repairing and Building."
Send proposition on:

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NEPONSET Roofings.	[ ]
NEPONSET Shingles.	[ ]
Wall Board.	[ ]
Waterproof Building Papers.	[ ]

Name ... ...

Address ... ...

BIRD & SON, Hamilton, Ont.

MONTREAL ST. JOHN WINNIPEG
CALGARY VANCOUVER

Canada Lumberman & Wood Worker

Issued on the 1st and 15th of every month by

HUGH C. MACLEAN, LIMITED, Publishers

HUGH C. MacLEAN, Winnipeg, President.
THOS. S. YOUNG, Toronto, General Manager.

OFFICES AND BRANCHES:

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VANCOUVER - Telephone Seymour 2013 - Hutchison Block
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Single copies 15 cents.

"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

Authorized by the Postmaster General for Canada, for transmission as second class matter.

Entered as second class matter July 18th, 1914, at the Postoffice at Buffalo, N.Y., under the Act of Congress of March 3, 1879.

Vol. 35 Toronto, September 1, 1915 No. 17

A Remedy for Present Troubles

Every man in the lumber business is anxious to get the best price he can for his stock, in good times as well as in bad; but it is of far greater importance to him to get good prices when business is slow than when it is active. At the same time it is infinitely more difficult to do so. One would expect therefore that a proposition to make it possible to get a living profit, even for a limited variety of stock, would meet with hearty approval and result in immediate action being taken to put into effect any reasonable means for bringing about such a happy state of affairs. The trouble however, in connection with any such proposal is the difficulty in persuading sufficient members of the trade that it is feasible.

Recently, in Toronto, a plan has been discussed by the members of the Lumbermen's Section of the Toronto Board of Trade, for establishing a list price on a few of the chief lines which are called for at retail yards; the idea being that retailers should insist upon these prices and confine their price-cutting, if they want to do any, to other lines which are not of such importance. The case of hemlock is the chief one which has been under discussion. It is a well-known fact that practically every customer who buys lumber from the retailers in any quantity asks the price of hemlock first of all and generally deals with the firm which quotes the lowest for hemlock irrespective of what it asks for other lines. Hemlock therefore, is an excellent line upon which to set a fixed price if any such plan is to be tried. Moreover, the conditions in connection with hemlock seem to be working out in the direction of a reduced supply, together with absence of competition from imported stocks, factors which will make it feasible for the retail yards to ask a higher price.

After listening to the discussion of many retailers and wholesalers upon this subject the Canada Lumberman is pursuaded that there is good reason for trying a plan of this nature. The worst that can result is that things will remain as they are. They cannot be reduced to a more unsatisfactory state. There is everything to gain and nothing to lose by trying to work out a solution along the line of fixed prices for goods which are in such small demand that no amount of price-cutting will increase the volume of trade. This is exactly the situation in connection with hemlock and to a greater or less extent it applies also in connection with most other lines carried in the retail yards; so that the time seems to be opportune for trying to put an end to the price-cutting which is so ruinous to the trade to-day.

No one will deny that there are many obstacles in connection with working out such a plan, but obstacles were made to be overcome and, if we stop at each obstacle we meet, there will never be any progress whatever. Even the making of such an attempt would have a good effect upon all the retailers taking part in it. It would call attention forcibly to the ruinous condition of the trade. It would show to each member of the trade that the others have come to realize the seriousness of the situation, and would thus put heart into those who have been hoeing their own rows in solitude against such apparently hopeless odds. The feeling that others were co-operating in order to put an end to the trouble would be a great stimulous to those who were almost convinced that remedy was impossible. Even if it were found to be impossible to stiffen the price, it would at least be possible to maintain the present level by concerted action and thus prevent further sagging. If this were done, much would already have been accomplished towards establishing a firm foundation from which to make advance in due season, when conditions may have actually improved.

As one prominent wholesaler speaking from a sympathetic outsider's point of view, said, during the discussion of this subject, unless something of this nature is done, it is only a question of time before some members of the trade will be forced out of business. It is not absolutely necessary that every one of the retailers in a place like Toronto should be brought into such a plan. If a strong majority could be prevailed upon, the others would presently co-operate or would be reduced, so far as their available stocks are concerned, to a point at which their competition would not be of importance.

The discussion upon this subject so far has served to show that there are many difficulties in connection with the plan, but it has also served very definitely to convince those who have taken part in it that it is well worth a serious trial. We hope, in an early issue, to be able to report that definite steps have been taken towards putting the plan in operation.

More about Hemlock

In recent issues of the Canada Lumberman we have published a large number of letters from lumbermen in Ontario discussing the situation in connection with the trade in hemlock. While opinions have differed to some extent as to the causes of the present situation and as to the best means of effecting improvement, there has been no hesitation on the part of anyone to acknowledge the unsatisfactory nature of the trade to-day and to urge the adoption of some steps looking towards a remedy. Apparently the situation comes down in the end to about two points. Some members of the trade believe that conditions have already commenced to right themselves through the operation of the law of supply and demand; while others urge the necessity for adopting an agreement between manufacturers to hold for a fixed base price—about $17 f. o. b. mills for No. 1. There is no question that if this latter step were feasible it would immediately remedy the situation, but we have strong doubts as to its practicability. Agreements to hold for a given price are seldom effective for any considerable length of time. In connection with hemlock particularly, it has unfortunately been the case in the past, no matter how many of the manufacturers decided to stand for a certain price. there were always others who were content to accept something less and prevent the manufacturers in general from securing the profits they should have from the business.

This condition seems to be with us always, and there is not much use in trying to remove it artificially. To-day, however, the market conditions which have been developing during the past year have, to a very great extent, removed the influence of the price cutter

and it does look as though those who hold out for such a price as $17, will be able to get it in the near future. Available stocks have been reduced greatly and manufacturers are not in a mood to go into the woods extensively during the coming winter. The competition of imported hemlock from Michigan and Pennsylvania has been reduced to the vanishing point, and if there were any demand whatever for hemlock it would be possible to get such a price as we have mentioned. But the demand is dead. Therefore we believe that there is nothing to be gained by attempting to force hemlock stocks on the market at a sacrifice price. The market does not want them for the simple reason that the speculative class of building into which hemlock enters so largely has not been going on for many months and shows no signs of reviving until after the war. Why then should not all those who have hemlock face the situation calmly and wait until the consumer wants it A few weeks ago it did not look as though many manufacturers were inclined to conduct their business along these lines, but the letters we have recently published indicate a growing disposition to follow such a course. If it is followed, the complaints of the hemlock men will speedily come to an end. The volume of trade in hemlock will not be increased thereby, but at lease those who own hemlock will have the satisfaction of feeling that they still own it and that with a fair degree of patience they will be able to turn it into money at profitable prices.

We have published elsewhere in this issue an interesting letter from a prominent Toronto wholesaler in which he states that the Michigan and Pennsylvania manufacturers have advanced their prices and taken their stock out of the Canadian market. The same writer outlines briefly and clearly some of the chief causes which led up to the present hemlock situation in Ontario. He also has an interesting word or two to say about the class of southern stock which has been competing with hemlock during the past few years. Those of our readers who are interested in hemlock ought to read this letter.

Threshing Out Trade Classification

The various important problems connected with the shipment of lumber by the railroads which are continually coming up for discussion, both in the United States and Canada, are a strong proof of the fact that, from the point of view of the lumbermen as well as that of the railroad companies, the shipment of lumber is one of the most vital matters in connection with the successful operation of a railroad. In Canada we have had our problems in connection with this matter continually before the Dominion Board of Railway Commissioners. In the United States the Interstate Commerce Commission has been similarly occupied. In the latter country a development has recently taken place which will be of great importance to all parties concerned and the result of which will be watched with interest in Canada. Mr. A. F. Marsh, chairman of the Traffic Committee of the National Hardwood Lumber Association and of the Lumbermen's Association of Chicago, in a recent article upon the United States situation sums up the position in part as follows:—

By an order of July 9 the Interstate Commerce Commission entered into a general inquiry into the rates, practices, rules and regulations of common carriers governing the transportation of lumber and lumber products to all points in the United States, with special reference to the relationship on different kinds of lumber and lumber products.

This inquiry is the result of the long-standing confusion relative to correct classification. From the very beginning, railroad companies and individual carriers made their own lumber commodity classifications, each of which has been different from that of the other carrier. In recent years carriers in certain rate districts have succeeded in placing their classifications on a common basis, although this has but in part succeeded. The increasing number of complaints, however, before the Commission caused them, some eighteen months ago, in the Eastern Wheel Manufacturers' case, to suggest to the railroads that the three classification committees prepare a uniform list of lumber and forest products which could be adopted throughout the country. After a long delay the five rate associations surrounding and including the C. F. A. territory appointed a committee, three from each of the five associations, with J. E. Crosland of the L. & N. as chairman. After repeated meetings up to June of this year, the committee has finally proposed a list to the individual carriers for their acceptance. This list, however, apparently, was prepared too late and not called to the Commission's attention and, as a result, a general order has been issued to cover the entire country.

This general order by the Commission will arouse much discussion among lumbermen as well as among carriers, although lumbermen have long been known for their lack of interest in lumber rate matters.

The traffic officials closely connected with lumber tonnage have for many months noticed the tremendous reduction in lumber movement over their lines, and those close to the industry itself have known that there has been a tremendous depression in this third greatest industry of the nation. Sawmills over the entire country recently have been forced to put their invoices through the bank as never before, and in the South, as well as in the West, have been sacrificing one of the nation's assets at a tremendous national loss. The lumbermen therefore feel that the opportunity is now presented for them to show the railroads that a classification may be made which will allow the lumbermen to increase materially the amount of lumber which they remove from an acre of land. In this connection one of the large sawmill owners of the South recently said that, while they usually remove 14,000 feet from an acre of timberland, the present conditions are such that they are only removing 10,000 feet per acre to the railroads in tonnage.

With lumber and forest products the second largest tonnage in the country, the railroads must be directly influenced by any action of the lumbermen. Recent statements of larger southwestern lines have shown that two-thirds of the loaded lumber cars coming from the North have gone to the South as empties, so any effort which would increase heavier loading would decrease the number of empty cars hauled South. It is therefore supposed that any classification action by the railroads would tend to increase the loading per car so as at the same time to reduce the number of empties now necessary to be hauled South. The tremendous tonnage moving over the larger lines of the country throughout the entire year, as compared to the coal movement, which moves during the period of greatest operating difficulty, places lumber in a very strategic importance as far as railroad operation is concerned.

In the early days of transportation history of the country neither lumbermen nor railroadmen felt that the prosperity depended upon that of the other. In recent years, however, this attitude has entirely changed, so that to-day far-seeing traffic men regard lumber as one of the very foremost commodities to be secured. In addition to its very large tonnage, the fact that lumber may be transported at a minimum operation expense, with almost no cost of assembly and a minimum claim expense, and the further fact that it does not need to be greatly rushed, makes it doubly desirable. With the railroads as one of the largest purchasers of lumber and the lumbermen one of the greatest shippers, this present close relationship and co-operation between lumbermen and the carriers should be maintained if at all possible. The financial condition of the roads is such that they would be greatly benefited by a material increase in tonnage from the lumbermen and the lumbermen would in turn be benefited by having the railroads of the country prosperous.

Any changes in classification must necessarily affect both the railroads and the lumber industry. The present chaos in the lumber classification makes it difficult for the railroads correctly to assess charges, while lumbermen must figure on different classifications for almost all shipments which they make. Any change, therefore, should be of material importance to either party. Far greater importance will be attached to the fact that both sides will now be able to present

their case to the Commission in such a manner as to allow each to study the peculiarities of the other. This will demand most careful attention, but a successful conclusion undoubtedly should be secured.

Mr. Marsh's article also includes an interesting consideration of the enormous waste in logging which could be greatly lessened by a more scientific classification of railroad freights upon lumber. The fundamentals of classifications he sums up as follows:—

(A) Correct principles of railroad classification.

(B) The low market value of many forest products.

(C) The continual unredeemable loss of tonnage by present-day methods of manufacture and rate construction.

(D) Enormous present—and future potential—value of forest products as revenue tonnage.

How Do You Find Business?

What kind of an answer will you get nowadays if you step into the office of a lumberman and ask him how he finds business? In many cases he will tell you it is bad; in some cases he will be facetious and say that he does not "find" it at all. A few jovial looking individuals will tell you that it is alright, they are getting their share, etc., etc. From one office to another, day in and day out, one may ask the same question and receive many different answers. But he will be struck at the same time by the number of men who reply that things are not so bad after all. Now there is probably a good deal of truth in this statement, even if in some cases it is expressed with a mental reservation or a saving clause which reveals the presence of doubt in the mind of the speaker.

With all due deference to the man who believes that things are as bad as they could be, and to those others who are not able to see daylight ahead under any conditions whatever, we are inclined to side with the man who takes a fairly bright view of things to-day. We do not want to persuade our readers that everything is lovely, but we do want to tell some of those with whom we have lately been talking that they are in the wrong in continually making themselves believe that things are bad and are steadily going from bad to worse. The situation in Canada to-day is a far brighter one than that which we had to face a year ago. At that time we had the greatest crisis in all national or economic history to face and had no precedents to go by. We were at sea without an anchor and in the presence of a great storm. To-day we have settled down to a state of affairs which, while it is utterly different from that which we were accustomed to consider as normal in times of peace, is rapidly becoming normal for war times. We are adjusting our manufacturing output and our consuming habits to the conditions of war. We are producing not only war materials in vast quantities, but food-stuffs also in unprecedented volume and of exceptionally high grade. Our crops in the northwest are practically safe. They will be the greatest and the best of all crops that have ever been gathered in Canada. They will bring wealth to the farmers of the northwest, and that wealth will inevitably find its way into general circulation, buying the activities and the products of our laborers and our factories. The croaker in Canada to-day will have a bad time of it. He will soon have nothing whatever to go upon for his argument, except the fact that the great war is still apparently in its early stages and that we may have many dark days ahead of us before we are out of the wilderness. But what of it? The war is with us and it is our duty to make the best of our business conditions while the war lasts, thus helping in the struggle against the enemies of our Empire, and we have in our crops and in our great manufacturing activities a splendid means to this end.

Take the case of Ontario as a further example of the situation. We have heard a great deal recently of the enormous damage done by the continuous and heavy rains of the past month. The damage by the rain, however, is probably far less than many at first were led to believe. Unquestionably some of the wheat has grown since the rain. But many Ontario farmers will tell you to-day that the wheat, although it has grown, is worth a dollar a bushel for feed, owing to the high price of bran and shorts. The oat crop is very heavy throughout Ontario this year and will bring large profits to the farmers. So far, there has not been rain enough to hurt the oat crop. The corn crop has improved greatly during the past few weeks and has practically recovered from the effects of the great wind and rain storm which laid so much of it low. The rain which has possibly reduced the farmers's profits from his wheat has, at the same time, brought along a second crop of clover and alsike and has improved the pasturage for stock. Cattle will probably be able to pasture in the open this year until the snow flies, and the farmers will benefit accordingly. The employment situation also has greatly improved as compared with a year ago. The number of unemployed has been much reduced.

Therefore, taking everything into consideration, we do not see that the people of Canada have much to complain of to-day in connection with the economic situation. Although business conditions in many lines, among them lumber, are exceptionally quiet, we cannot see anything ahead that will prevent a gradual improvement. Lumbermen are not counting upon this improvement in the immediate future, but they have every reason to expect that even during the coming fall the prosperity of the farmers will bring back to trade in general a fair measure of acticity and profit.

Editorial Short Lengths for Busy Readers

According to the annual statement of the trade of the United Kingdom with foreign countries and British Possessions for 1914-15, which has recently been issued, the total imports from foreign countries and British possessions were valued at £696,635,113, being £72,099,626 less than in the previous year. Imports from foreign countries only were £68,385,303 less, and from British possessions £3,714,323 less.

The total exports of produce and manufacturers of the United Kingdom to foreign countries and British possessions were valued at £430,721,357 compared with £525,245,289 in 1913-14; being a decrease of £94,523,932. The exports to foreign countries were £70,846,622 less, and to British possessions £23,677,310 less than in the previous year.

Among the commodities imported from Canada showing an increase in value are included hewn fir, spruce, etc., to the value of £96,456, an increase of £23,220; also oak to the value of £100,792, an increase of £16,356. The list of commodities showing a decrease included millboard and wood pulp board to the value of £78,718, a decrease of £25,443; sawn or split fir, pine, spruce, etc., to the value of £2,579,992, a decrease of £449,836; timber (unenumerated) to the value of £232,616, a decrease of £66,829; furniture wood (including woodware and wood turnery) to the value of £40,391, a decrease of £12,263.

An interesting instance of the extent to which the timber resources of British Columbia have been under-estimated is given in reports recently submitted to the Honourable W. R. Ross, Minister of Lands. Cruisers lately returned from an examination of the valleys of the Elk, Salmon, White and Gold Rivers on Vancouver Island came across one hundred thousand acres of unalienated crown timber, an average stand of fifteen thousand feet to the acre, representing a total of one and a half billion feet. This timber is readily accessible, in fact the grades which exist in these valleys render it possible to bring logs across the island from Nootka to Salmon River, crossing the surveys of the Canadian Pacific and Canadian Northern railways.

The Reader's Viewpoint on Trade Topics

The Hemlock Situation—Canadian Hardwood Grading Criticized—English Trade Favors Canadian Goods

Articles or letters to the Editor of the Canada Lumberman, dealing with trade conditions, or discussing questions of interest to manufacturers, wholesalers or retailers of lumber are always welcomed by our readers. Here are a few that have been received lately:—

Hemlock Manufacturers Should Ask Seventeen Dollars

Editor Canada Lumberman: Toronto, Ont.

Your article on the hemlock situation leaves little to be said by any one else.

The trade has never before faced so peculiar a condition of affairs. The Michigan and Pennsylvania manufacturers have advanced their prices and taken their stock out of this market. Very little hemlock is being sold at any price, because speculative housebuilding is for the present an absolutely negligible factor in the lumber trade.

Some wholesalers have carried last year's purchases over the winter and are selling now at a loss, but in such cases the seller is likely to hold the price as high as possible so as to minimize the loss.

The price cutting has been mainly the effort of some of the smaller millmen and some wholesalers who, being cramped for funds, have sought to realize quickly on their stocks, accepting a loss for the sake of a quick return. **It would certainly seem to be good policy for the hemlock manufacturers to get together and stand on $17.00 f.o.b. mills as a base price.** The most serious loss to the hemlock trade has not been caused by the competition of Michigan and Pennsylvania hemlock, but by the deluge of loblolly or short leaf yellow pine which has been poured into Ontario at slaughter prices during the past three years. There are thousands of houses in Toronto, built of the inflammable stuff which rots in two or three years, and the accident of a fire would in a few minutes turn such a house into a brick furnace filled with the fiercest blaze that can be imagined.

Loan companies have been lending money on the security of such houses, and insurance companies have been ignorantly passing them, which is not to be wondered at when one considers the knowledge of such matters on the part of the average inspector.

But jerrybuilders want cheap stuff, and lath, plaster and paint cover a lot of rottenness.—John Donogh.

* * *

A Hard Knock at Canadian Grading

Editor Canada Lumberman: Jamestown, N.Y.

Your recent favor received, and proof of your letter which you inclose which was recently published in the Canada Lumberman and Woodworker, which describes the situation very well. **The trouble with Canadian mills is, however, that they only want to ship Common & Better or Log Run while the consumers here want 1s and 2s or No. 1 Common, or whatever the case may be. The Canadian mills certainly lose a lot of business by not being able to ship the grades a customer wants, and not only that but shipping unsatisfactory grades. The truth is, there are few shippers in Canada to be depended upon to ship a straight grade of stock.** We do not think as a class they intentionally ship inferior grades, but we do think as a rule it is more in not knowing what a grade should consist of. In any event they lose a lot of business because customers in the United States cannot depend upon their grades. We also suppose there is more or less mixing of grades going on over on this side. In fact we think your United States wholesaler, who signs his name as such has covered the matter quite well.—Warren Ross Lumber Co.

* * *

Canadian Goods Preferred in England

Editor Canada Lumberman: Glasgow.

We have your favor regarding the English market for Canadian stocks. In our opinion the statements made by Chas. T. White & Son, are in some instances inaccurate and in a general way they err in the direction of exaggeration. As regards spruce, the great bulk of the United Kingdom imports (outside of Baltic stock) comes from Canada and the lower ports, and though a limited proportion of that comes through U. S. ports, such as Boston and Portland, this is entirely a matter of freight arrangements, it being immaterial to the buyer here how it comes forward. In recent years, as you are of course aware, a trade has been developed between this country and Oregon and British Columbia in spruce, but this does not enter into competition with the Canadian product. It has been often deemed a remarkable feature here, in connection with the supplies of Canadian spruce, that lengths should compare so favorably with the Baltic stock, and if there is no reason why a fair proportion of 18, 19, 20, 21, 22 and up to 30 ft. lengths should not be supplied to give greater variety to the specification, then this matter is well worth the consideration of those in your country, who are identified with this trade. If the producer can be got to overcome his objection to cutting anything longer than 16 feet, it would prove of assistance to him in dealing with buyers here.

As regards the statement in your article, that a preference is given to United States goods, we think this is inaccurate, the preference being all the other way. A further statement is made that birch from the States is imported more freely than from Canada. This, we should say, is opposed to the facts, the imports from the latter exceeding those from the former very considerably, because of it being much cheaper. No doubt it is mostly sold in Canada "log run" and whether it would be to the benefit of producers to grade their lumber into 1sts and 2nds and commons, as they do in the States, is a matter for their consideration.—Edmiston & Mitchells.

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Quebec Mill's 1915 Output All Sold for Export

Editor Canada Lumberman: St. Pacome, Que.

We do the bulk of our business with the United States, and although we have sawn a small quantity for export to U. K., up to this year we have been out of this business for seven or eight years. As far as my company is concerned we have sold our total output of 1915 sawing; part for export to United Kingdom and balance for export to United States. The English market is fairly active as regards spruce, but pine is moving slowly. The greatest difficulty is getting vessels to carry stock across the ocean, and, as you know, rates are now about 140 shillings as against 35 to 40 in previous years. The United States market although not very active in buying of spruce seems to be fairly active as regards pine, but we are getting our share of orders, and so far we really cannot complain about conditions.

The Montreal market is practically at a standstill and interferes with us to a certain extent in the shipping of our low grade stocks.—W. Gerard Power, River Quelle Pulp and Lumber Co.

* * *

Importance of Maintaining High Grades

Editor Canada Lumberman: Liverpool, Eng.

We duly received your favour enclosing a copy of an article that was to be published in the Canada Lumberman in reference to the grading rules now in operation for pine and other woods and we note your desire to receive from us some expression of opinion in regard thereto. It is, in our view, requisite and desirable for the trade to maintain a high grading of stocks so that they may meet with appreciation and support in this country. From the knowledge we have been able to gather through long years of business, we believe a policy of furnishing high grade stock will be found more profitable in the long run to manufacturers than if they allow their grading to become slack and permit a lowering of the standard qualities to enter therein. —Edward Chaloner & Co.

Wood Pulp a Base for Explosives

From a lumberman's point of view a news item in connection with the war which was recently published by tht London Chronicle is of exceptional interest. A citizen of a neutral state who has just made a tour of Germany reports to the Chronicle that he has acquired much information regarding industrial and economic conditions in Germany and that one of the most important and interesting facts he came across was that German chemists had discovered in wood pulp a substitute for cotton as a base for high explosives. "Experiments are still being carried on," he said, "but sufficient has already been done to permit the substitute to be used freely and successfully. The great difficulty in the way of using wood pulp as a substitute for cotton is the presence of many impurities which are not found in the latter commodity. Unless these are completely removed the resulting explosives would be uncertain in action and highly dangerous to those manufacturing them.

"I was not able to discover the whole secret of the process, but in its early stages it is the same as that which is followed in turning wood into pulp for the manufacture of paper. The wood is ground. cooked and changed into a liquid form, when it is cleansed by new processes and then pressed into sheets. It is then ready for the nitration process and the addition of other necessary chemicals.

"Germany is under no difficulty so far as the supply of raw material is concerned. At one time she was dependtnt upon Scandinavia for supplies of wood pulp, but some years ago she set herself to making her own, since when she became largely self-supporting in this direction. Three of the largest factories are now engaged in turning out the new base for explosives as well as the seasoned wood required for making wood pulp."

A Good Opening for Exporting Canadian Shooks

According to a recent report issued by the United States Department of Commerce, the Canary Islands, with an annual importation approximating 10,000,000 boxes and crates are among the important shook markets of the world. This great quantity of packing material has heretofore come from Norway and Sweden, and American manufacturers have so far been unable to meet the low prices of the Goteborg shippers. Within the past two months, however, the prices of the European suppliers of shooks for packing bananas, tomatoes, and potatoes have rapidly risen, and c.i.f. quotations now average 25 per cent. higher than formerly.

This should mean that the Canary market is open on a profitable basis to American producers of box shooks. So marked has been the recent advance in prices from Norway and Sweden and so uncertain the deliveries that the largest fruit exporters and the largest wholesaler of shooks and packing materials in Teneriffe have asked for information concerning possible American producers who could supply their needs. High prices induced one wholesaler of shooks to import shooks from Portugal, but he has since reported the wood shipped from Portugal to be too hard, liable to split when the shook is assembled, and generally giving poor satisfaction. He is now anxious to secure samples from American producers of shooks.

The opening of the Panama Canal should greatly increase the chances of manufacturers on the Pacific slope, as the freight rates around Cape Horn had practically cut off this shook-producing section of the United States from all competition here. With the canal in operation, it has been suggested by local buyers that sailing vessels (carrying cargoes of shooks and sawdust, together with ship timber and other lumber) could name advantageous c.i.f. figures in Canary ports. Eastern producers of shooks should note that present supplies usually arrive in comparatively small quantities, and space might be found on board collieries bringing coal to the Canary Islands, of which the number from New York, Norfolk, and Baltimore has been steadily increasing since the beginning of the year.

Specifications for Box Shooks and Crates

Dimensions for the big buyers vary slightly, but the different bnyers maintain their own standard sizes and base their freight arrangements on them. Specifications of the most used sizes of crates and boxes are herewith given:—

Banana crates, 28-inch size, $110.98 per thousand, c.i.f.; eight pieces, 10 to 16 by 3 by 5/8 inches; 2 pieces, 14 by 2 by 5/16 inches; 8 pieces, 28 by 2 by 3/8 inches; and 4 pieces 29 by 2 by 3/8 inches.

Banana crates, 28-inch size, $102.80 per thousand, c.i.f.: Eight pieces, 10 to 16 by 3 by 5/8 inches; 2 pieces, 14 by 3 by 5/16 inches; 8 pieces, 28 by 2 by 3/8 inches; and 4 pieces 29 by 2 by 3/8 inches.

Banana crates, doubles, $129.57 per thousand, c.i.f.: Four pieces, 16 to 10 by 3 by 3/8 inches; 4 pieces, 22 to 28 by 3 by 5/8 inches; 6 pieces, 14 by 3 by 1/4 inches, and 16 pieces, 26 by 2 by 3/8 inches.

Tomato boxes, 7-inch size, price per thousand boxes, c.i.f., $57.86; 100 pieces in bundles, 16 by 6 by 3/16 inches; 100 pieces in bundles, 16 by 4 by 3/16 inches; 50 pieces in bundles, 16 by 7 by 1/4 inches; 50 pieces in bundles, 9½ by 7 by 7/16 inches; 100 pieces in bundles, 29½ by 1¼ by 7/16 inches.

Tomato boxes, 6¾-inch size, price per thousand boxes, c.i.f. $57.30; 100 pieces in bundles, 16 by 5 by 3/16 inches; 100 pieces in bundles, 16 by 4¾ by 3/16 inches; 50 pieces in bundles, 16 by 6¾ by 1/4 inches; 100 pieces in bundles, 28¼ by 1¼ by 7/16 inches.

Potato boxes, $155.75 per thousand: Two sides, 29 by 7 by 7/16 inches, in 1 piece; 2 tops and bottoms, 29 by 16½ by 3/8 inches, in 3 pieces; 2 ends, 15⅝ by 7 by 5/8 inches, in 1 piece.

The customary terms of settlement for shooks are cash with a 2 per cent. discount against shipping documents. Shooks purchased in thousand lots, are plainly marked as to dimensions or with the private marks prescribed by the individual firms, and are tied with strong wire for transhipment.

Samples are Required

For the shook trade it is indispensable that samples made up on specification should be sent to buyers; only actual experience will show the advantages to accrue from buying these materials in America. Also it should be remembered that great quantities of shooks are being produced in Norway and Sweden, and that these will be thrown on the market after the war has ended and at very low prices. The present exporting season is about finished, and the next crop will be at its height in December. This should allow time for American producers to get in touch with purchasers in this district and to forward samples prepared according to specifications received direct from the buyers themselves.

Ship Timber and Building Lumber

Coal barges are made in Teneriffe and Las Palmas the year round for use in the rapidly growing bunker-coal trade. Timber for coal-barge making has greatly increased in c.i.f. prices during the past two months, and the big coal companies—three in number—which build their own barges would like to hear from American firms with quotations for deliveries here. As a number of colliers have been chartered to bring cargoes to the Canaries from the United States, lumber could perhaps be shipped above decks, as has been the usual custom with Norwegian and Swedish cargoes of like character.

Likewise, lumber is being sought at present for the construction of small houses for labourers in the cities of Teneriffe and Las Palmas. This is now being undertaken by building and loan associations, which have made their appearance in these islands recently and are making remarkable progress.

Toronto Trade Discuss Fixed Prices

Proposal Considered for Ending Ruinous Conditions Now Prevailing—Hemlock the Chief Sinner

The Lumbermen's Section of the Toronto Board of Trade had an interesting discussion at their weekly meeting in the Board of Trade quarters on August 20. Mr. J. L. Campbell occupied the chair and the subject of discussion was a motion introduced at the previous meeting by Mr. J. B. Reid, to the effect that a committee should be appointed to draw up a list of prices for about 10 of the chief lines of stock carried in the retail yards in Toronto; this list to be submitted to all the retailers belonging to the Lumbermen's Section of the Board of Trade for signature. Mr. Reid's idea is that the retailers should maintain a fixed price upon each of these lines and that, if any price-cutting is to be done, it should be confined to the other lines. In this way he hopes to bring about sufficient improvement in the retail business in Toronto to enable its members to make a living profit in return for their hard work. Such a plan, Mr. Reid said, would make no difference in the amount of business actually transacted, but it would make a great deal of difference in connection with the trade if they could see a little bit of daylight between the cost of their stock and the selling price. He believed that the retailers to-day had the remedy in their own hands if they would only apply it.

A few members expressed the opinion that the present was not a suitable time for trying to put into effect anything in the nature of a fixed base of prices, thinking that it would be practically impossible to carry it out effectively. This view was keenly opposed by two wholesalers present at the meeting, Mr. W. J. Lovering and Mr. J. L. Campbell. Mr. Lovering stated that the retailers in Toronto to-day had a better opportunity of arriving at something reasonable in the way of an arrangement to improve their trade conditions than any other section of the lumber trade. He thought in particular that the hemlock situation provided an excellent basis upon which to commence work. It was as good a time as any, he said, for the retailers to steady themselves and stop doing business at a loss. It was not sane business to continue operating at a loss. The community did not demand it. If they all decided to ask a certain price upon suitable articles he could not see any reason why it would not be a good move and one which could be successfully carried out.

Mr. J. L. Campbell agreed with Mr. Lovering. Everyone recognized, he said, that this was the correct thing to do, but that there were many obstacles in the way. At the same time, if they were to hesitate in undertaking a proposition because of apparent obstacles, there would be very little headway made. There was so much involved in this plan that a good honest attempt ought to be made to work it out. It would have a good effect from the retailer's point of view. It would call attention to the ruinous condition of the trade. It might incline them, if not to increase the price, at least to maintain it from going from bad to worse. If that could be done something would be accomplished, and it would be a beginning in the way of establishing a firm basis from which gradually to bring prices back to a half living profit. It was only a question of time as to how long some men in the trade could remain in business under present conditions. If something could be done to prevent such a disaster it would be a great thing. He himself felt that this was a matter that would require the co-operation of nearly all the retailers in the city. Yet he believed that if a strong majority could be brought together to work out such a plan the other members of the trade would either fall in line or would soon be unimportant enough to leave out of consideration. He concluded by repeating that although he saw many difficulties in the way he thought a strong attempt should be made along these lines, if only because of the good effect that it would have from an educative point of view.

The discussion which followed showed that practically every member was in sympathy with the object of the motion, although some were still doubtful in regard to its feasibility. Finally it was decided that all the retail members of the section should be invited to attend the next weekly meeting in order to lay the matter definitely before them and have a vote taken upon it. The meeting then adjourned.

The Commercial Importance of Oak

Technical Properties and Practical Uses of the Different Varieties of Canadian Oaks

By A. H. D. Ross

1. 2 3. 4.

1.—Plain white oak.
2.—Quarter cut white oak.
3.—Plain red oak.
4.—Quarter cut red oak.

The oaks are world-famous trees and form a large group widely distributed over the temperate portions of Europe and Asia, Northern Africa, North America and the high mountains of Central and South America. Some authorities state that there are no less than 275 species of oak, whilst others claim that the number almost reaches 300. For North America, Sargent places the number at 47, whilst Britton describes 63 species—the extra 16 being due to the splitting up of certain species described by Sargent. This is a good illustration of the old adage "Even the doctors differ," but there is no disputing the fact that nearly all the oaks grow to tree size, that they have deep and very strong heart and tap roots and that they are persistent growers and long-livers. The wood of the different species is quite variable but is usually very heavy and hard, very strong and tough, shrinks and checks badly in drying but is little subject to the attacks of boring insects and is quite durable in contact with the soil, whilst the bark of many species is rich in tannin.

The White and Black Oak Groups

Both as regards their botanical characteristics and the minute structure of their woods, the oaks may be divided into two great groups known as the White Oak group (in which the acorns ripen at the end of the first season and the cups have a smooth inner surface), and the Black Oak group (in which the acorns ripen at the end of the second season and the cups have a silky-hairy inner surface)—which reminds us of the scriptural dictum "By their fruits ye shall know them." Usually the white oak group is subdivided into the White Oaks and the Chestnut Oaks, whilst the black oak group is subdivided into the Black Oaks and the Willow Oaks. Of the Canadian oaks, the only species belonging to the White Oak group are White Oak, Western White Oak, Burr Oak, Swamp White Oak, Chestnut Oak and Yellow Oak. Of these six, the three last named belong to the Chestnut Oak subdivision.

In the Black Oak group we have Black Oak, Red Oak, Scarlet Oak and Pin Oak—none of the Willow Oak subdivision being found in Canada.

Structure of Oak Wood

The great strength of the oaks is due to the character of the tiny cells of which their wood is composed. A piece of wood is not simply a material but a structure, just as much as a railroad bridge or a balloon frame, and to understand properly its behaviour under the action of external forces it is necessary to know a good deal about its internal structure.

One of the most obvious things about the structure of all the oaks is the presence of broad pith rays extending from the heart to the circumference, and a small magnifying lens reveals the presence of a large number of intermediate rays. In the case of "edge grain" or "quarter sawn" lumber, it is the exposure of these pith rays which gives to oak its attractive appearance. In cross-sections of the wood it does not require very much magnification to show that the wood cells are generally very thick-walled—and it is this peculiarity which accounts for the great weight and strength of oak. The presence of the pith rays is a source of weakness because these rays are like great wedges in the wood running from pith to bark which is largely responsible for the checking of the wood in the process of drying. With a still further magnification of the cells in cross-section it is seen that those formed early in the growing season are comparatively thin-walled, whilst those formed later in the season (summer wood) are much thicker walled. Furthermore, the miscroscope reveals the fact that in the case of white oak and other oaks belonging to the white oak group, many of the cells are plugged up with a cement-like material (tyloses) which renders them impervious to moisture and thus makes these woods very valuable for the construction of casks for the storing of wine, whiskey and other valuable liquids.

In the case of the black oak group the tyloses plugs are not present, and the result is that these woods are not in demand for tight cooperage. Sometimes these more porous woods are treated with soluble silicates so as to render them impervious, but they are generally restricted to the slack cooperage industry.

White Oak

White Oak (Quercus alba) is usually mixed with other hardwoods and adapts itself to various soils, from rich moist bottom-lands to gravelly ridges, but is more or less scrubby on light sandy soils. Its range extends from southern Maine to the Valley of the St. Lawrence River, through Ontario to eastern Iowa and southward to northern Florida and Texas. Young trees stand considerable shading and grow fairly rapidly, but old trees are intolerant of shade and grow slowly. A study of 132 trees in Tennessee shows that trees 10 inches in diameter (4½ feet from the ground) were grown in 107 years, 15-inch trees in 152 years and 20-inch trees in 192 years. Mature trees are from two to three feet in diameter and from 60 to 90 feet high; the bark being of a light gray or nearly white color and broken by shallow fissures into long, irregular thin scales which readily flake off.

The heartwood is of a light brown color (sapwood thin and lighter colored), usually straight-grained, fine-textured, weighs 50 pounds per cubic foot when thoroughly dry, and is hard, strong, tough and durable. The change from sapwood to heartwood takes place in from 10 to 15 years, which is much earlier than for most other oaks and is an important feature in the case of ties and posts because it lessens the percentage of perishable sapwood.

The average of 218 tests shows that white oak containing 12 per cent. moisture has an endwise crushing strength of 8,500 pounds per square inch, a cross-breaking strength or "modulus of rupture" of 13,100 and a "modulus of elasticity" of 2,090,000—thus placing it amongst the very strongest of our woods.

The miscroscope shows that the first formed (spring) wood in each annual ring is composed of 1 to 3 rows of comparatively thin-walled pores and that the transition to the very small pores of the summer wood is abrupt. These crowded pores have angular outlines which gives them the appearance of forming irregular grayish radial bands widening outward, and tyloses are abundant in the pores of both spring and summer wood. The pith rays are very large and high (up to 5 inches) and account for the conspicuous "silver grain" of quarter-cut material. If carefully seasoned the wood shrinks and splits very little but is liable to some twisting.

White oak is one of the most highly prized woods and is used for a great variety of purposes, such as tight cooperage, furniture, interior finishing, veneers, car construction, carriage work, agricultural implements, boat-building, pumps, picture frames, sleigh runners, hames, capstans, carvings, etc.

Western White Oak (Quercus Garryana) is also known as Pacific Post Oak, Oregon White Oak and Garry Oak and is usually confined to the valleys and dry gravelly slopes of low hills from Vancouver Island and the lower Fraser River southward through Washington and Oregon to the California coast valleys. A 19-inch tree was found to be 181 years old and a 27-inch tree 251 years. At high elevations the trees are small and scrubby, but under favorable conditions of growth attain a height of 50 to 65 feet and a diameter of 18 to 30 inches; sometimes up to 100 feet and 3 feet. The heartwood is of a light brown or yellow color (sapwood thin and nearly white), weighs 49 pounds per cubic foot, is close-grained, hard, strong and tough and resembles that of English oak (Quercus Robur)—producing beautiful effects when worked up into cabinets and other furniture. On the Pacific coast it is used as a substitute for eastern white

oak; the minute structure of both the white oaks and the English oak being very similar.

Burr Oak (Quercus macrocarpa) is also known as Mossy-cup Oak, Overcup Oak and Scrub Oak, and is more widely distributed than white oak but never attains so large a size. It ranges from Nova Scotia and southern New Brunswick westward along the St. Lawrence Valley to the northern shores of Lake Huron and across Lake Winnipeg to Montana and southward to Virginia and eastern Texas. Like that of the white oak, its bark is flaky but is of a brown or reddish color and has rather firmer ridges; whilst the acorns have extremely rough cups heavily fringed around the edge. The heartwood is of a dark brown to rich light brown color (sapwood thin and much lighter in color), weighs 50 pounds per cubic foot, is fine-textured, hard, strong and tough and is the most durable of all the oaks. Specimens containing 70 per cent. moisture showed an endwise crushing strength of 3,280 pounds per square inch, a cross-breaking strength of 7,180 and a modulus of elasticity of 877,000; whilst a reduction of the moisture content to 12 per cent. raised these strength values to 7,300; 13,900 and 1,320,000 respectively. The wood is rather more porous than that of white oak and is often mixed and sold with it.

Swamp White Oak (Quercus platanoides) is also known as Swamp Oak and Blue Oak, and prefers deep moist or inundated swamps and the low banks of watercourses from southern Maine to the St. Lawrence Valley and southern Ontario westward to Nebraska and southward to Georgia and Arkansas. Usually the trees are more or less butressed at the base and attain a height of 40 to 60 feet and a diameter of 18 to 24 inches. The bark somewhat resembles that of white oak, but the sycamore-like peeling from young branches distinguishes this species from other oaks. The heartwood is of a pinkish-brown color, with a thin and scarcely distinguishable sapwood, and weighs about 48 pounds per cubic foot. For a moisture content of 19.2 per cent. its endwise crushing strength is 8,030 pounds per square inch, its cross-breaking strength 19,210 and its modulus of elasticity 2,020,000. The swamp white oak is also known as "blue oak" because of the dark blue stain imparted to an axe struck into it. At one time it furnished much of the oak exported from that part of southern Ontario lying west of the Trent River.

Chestnut Oak (Quercus Prinus), is also known as Rock Chestnut Oak, Rock Oak, Mountain Oak and Tanbark Oak and is generally confined to sterile soils, but is met with occasionally on deep rich soils from southern Maine to the north shore of Lake Erie and southward to Alabama. A study of 26 cove, 93 slope and 24 ridge type trees in Tennessee shows that 10-inch trees were grown in 68, 100 and 102 years respectively; and 18-inch trees in 140, 186 and 200 years. When full grown the trees attain a height of 60 or 70 feet and a diameter of three or four feet; occasionally 100 feet and 6 feet. The bark is particularly rich in tannin and on old stems is reddish-brown to nearly black and is deeply fissured. The heartwood is of a rich brown color, rather fine textured, weighs 45 pounds per cubic foot, is rather tough and quite durable in the ground. Used for lumber, ties, fencing, fuel, and cooperage stock, but chiefly valued for its bark.

Yellow Oak (Quercus acuminata) is also known as Yellow Chestnut Oak, Chestnut Oak, Chinquapin Oak, Rock Oak and Scrub Oak. This tree is reported by Macoun as "Abundant on limestone soils in numerous places along both sides of the Bay of Quinte in the neighborhood of Belleville; also limestone shingle, Trent Valley above Trenton, and along the Trent at Campbellford Bridge, Northumberland County; very common on Queenston Heights and in numerous places around Niagara. Many fine trees in the park at Niagara Falls." Westward it ranges along the north shore of Lake Erie to Nebraska and southward is found in northern Florida and Texas. The heartwood is of a rich brown color, sapwood brownish-white, weighs 49 pounds per cubic foot, very hard, fine textured and durable. Suitable for furniture, wheel-work, ties, fencing, slack cooperage and fuel.

Black Oak (Quercus velutina) is also known as Dyer's Oak, Quercitron Oak, Spotted Oak, Yellow-barked Oak and Yellow Oak. It is usually found on poor soils or on dry gravelly uplands and ridges from southern Maine to southwestern Ontario and southern Wisconsin; southward to Florida and eastern Texas. Its rapidity of growth ranks next to that of red oak; a study of 944 ridge-type trees in Tennessee showing that 5-inch trees were grown in 38 years, 10-inch trees in 84 years and 15-inch trees in 12 years—the growth on better soils being proportionately greater. At maturity the trees are 50 to 75 feet high and 2 to 3 feet in diameter; sometimes 75 to 90 feet and 3 or 4 feet, or even 150 feet high in the Ohio River Basin. This oak is easily distinguished by its orange-yellow inner bark, which has an intensely bitter taste and was much used at one time to furnish the quercitron of commerce, used by dyers to produce various tints of yellow, and on being combined with salts of iron yielded a series of brown and drab hues.

The heartwood is of a light reddish-brown color, sapwood thin and lighter colored, but not tough. Specimens containing 11.4 per cent. moisture showed an endwise crushing strength of 7,120 pounds per square inch, a cross-breaking strength of 14,670 and a modulus of elasticity of 1,641,200. The lumber is generally mixed with that of red oak and is used for furniture, interior finishing, cooperage, etc.

In the black oak group the pores of the spring wood are generally 3 to 5 rows and are rather crowded; the transition to the smaller pores of the summer wood being gradual. In the summer wood the pores are usually visible without a lens, are not crowded, have somewhat circular outlines, are comparatively large and are rather thick-walled. Tyloses are usually scarce or absent but are sometimes abundant; whilst the pith rays seldom exceed one inch in height.

Red Oak (Quercus rubra) is also known as Gray Oak, Leopard Oak, Black Oak and Spanish Oak. This tree adapts itself to a wide variety of soils, excepting distinctly wet lands, and is usually associated with other oaks, elm, hickory, etc. Its range of growth extends from Nova Scotia and New Brunswick to Lake St. John and westward through Quebec and Ontario to Isle Royal in Lake Superior; through eastern Minnesota and southward to Florida and Kansas. A study of 358 trees in North Carolina shows that 10-inch trees were grown in 73 years, 18-inch trees in 116 years and 28-inch trees in 205 years. It is the most rapid grower of all the oaks and at maturity attains a height of 70 to 80 feet and a diameter of 2 to 3 feet; occasionally 120 feet and 4 feet.

The heartwood is from light brown to reddish in color, sapwood thin and lighter colored, rather coarse-textured, weighs 46 pounds per cubic foot, hard and strong. Wood containing 12 per cent. moisture exhibits an endwise crushing strength of 7,200 pounds per square inch, a cross-breaking strength of 11,400 and a modulus of elasticity of 1,970,000. It is used for construction timber, furniture, vehicle supplies, shipbuilding, car construction, picture frames, show cases, fuel, distillation, insulator pins, slack cooperage, etc.

Scarlet Oak (Quercus coccinea) is also known as Red Oak, Black Oak and Spanish Oak. Macoun says: "In University Park, Toronto, are a few fine trees, but they become more numerous to the west and the forest along the Niagara River and Lake Erie, it is an abundant tree." Eastward it ranges to southern Maine, westward to eastern Nebraska and southward to North Carolina and Missouri—being common on light, dry and usually sandy soils, and attaining a height of 40 to 50 feet and a diameter of 1 to 3 feet; occasionally 70 to 80 feet and 2 to 3 feet. Its crown is not so flat-topped as that of red oak nor is its bark so roughly broken; whilst the cups of the acorns are top-shaped and embrace from one-third to one-half the nut, instead of being saucer-shaped as in the red oak.

The heartwood is from light brown to reddish-brown, sapwood thin and darker colored, coarse-textured, weighs 45 pounds per cubic foot, fairly hard and strong but is less valuable than that of red oak.

Pin Oak (Quercus palustris) is also known as Swamp Oak, Water Oak and Swamp Spanish Oak. From southwestern Ontario this tree ranges eastward through Pennsylvania to Massachusetts, westward to eastern Iowa and southward to Virginia and Arkansas—being partial to deep, rich moist soil along the borders of swamps and river Bottoms. The trunk is tall and straight; the lower branches small, tough and drooping, the others mostly spreading and longer. Heartwood light brown, sapwood thin and rather darker colored, weighs 47 pounds per cubic foot, coarse-textured, bare and strong. Used for construction timber, fuel, cooperage, etc.

"Live" Oaks, or "evergreen" oaks retain their leaves until the second, third or even the fourth season and produce woods which are very heavy and close-grained and extremely durable. Formerly they were much in demand for ship-building, water-wheels and millwork. One of these oaks (Quercus Virginiana) belongs to the chestnut oak subdivision of the white oak group and ranges along the Atlantic coast from Virginia to Florida and along the Gulf of Texas. The other three belong to the willow oak subdivision of the black oak group and are confined mainly to the Pacific coast. They are Maul Oak (Quercus chrysolepis) of the coast region between southern Oregon and southern California and the high mountains of Arizona and the Encina (Quercus agrifolia) of Mendocino County, California, where it forms open groves of considerable extent; and Quercus Wislizeni of the lower slopes of Mount Shasta.

Oak Lumber

The following table shows the returns of oak lumber manufactured in Canadian mills during the year 1913.

Province	Active Mills	Board Feet	Percentage	Average Price
Ontario	228	5,081,000	80.0	$33.72
Quebec	62	611,000	9.6	25.89
Nova Scotia	26	614,000	9.7	30.84
Manitoba	5	26,000	0.4	24.00
New Brunswick	2	11,000	0.2	21.91
Prince Edward Island	1	5,000	0.1	40.00
Totals	324	6,348,000	100.0	

The cut of red oak usually exceeds that of other species; the black and scarlet oaks being usually mixed with it. In Manitoba the burr oak is the only species cut. In Ontario and Quebec there is very

little white oak left. South of the line from Belleville to Midland Ontario was once covered by a hardwood forest containing considerable quantities of the valuable white oak, but the clearing of the land for agricultural purposes has caused most of it to disappear, and the result is that out of 60,000,000 feet used each year in Ontario's woodworking industries over 60 per cent. is imported from the United States, approximately 10 per cent. is brought from Quebec and 10 per cent. is cut from Ontario farmers' wood lots—the remaining 20 per cent. being used in the form of bolts for heading, staves, etc.

In the United States the oaks easily rank first in the amount of lumber cut and the superior technical properties of the woods themselves. Even in the total cut the oaks rank third, and it is a remarkable fact that they still furnish 46 per cent. of all ties used; which in 1910 amounted to no less than 68,000,000.

Oak Ties

The structure of white oak and other members of the white oak group renders them very valuable for tie material. The thickness of the cell walls enables these woods to withstand crushing under the rail and the tyloses plugs resist the passage of air and water, thus rendering them more durable in the ground than members of the black oak group. On the other hand, the black oaks are easier to treat with preservative material because of their more porous nature. An oak tie holds spikes well, thus keeping the rail tight against it and lessening the impact or pounding action of heavy trains of cars. With cut spikes water is apt to collect around the spikes and under the rails—eventually softening the injured fibres and causing decay in two or three years. This necessitates respiking in a fresh place, thus adding to the maintenance charge. Untreated white oak ties last from six to ten years and the boring of holes for the spikes makes respiking unnecessary for three or four years, besides lessening injury due to the checking of the wood.

During 1913 the consumption of oak ties by the Canadian steam and electric roads amounted to 978,554, or 4.9 per cent. of all the oak ties used, and it is a remarkable fact that 96.8 per cent. of all the oak ties used were imported from the United States—thus affording another illustration of the scarcity of the white oaks in Canada. Most of the oak ties are used for switches, or where the traffic is unusually heavy. Usually the black oaks are treated before being placed in the roadbed and quite frequently the white oaks are also treated. During 1913 the Canadian roads purchased 525,623 treated oak ties (54.3 per cent. of the total); thus showing that it pays to apply preservative treatment to such hard, strong and even durable woods as oaks.

Old World Oaks

Of the old-world oaks, probably the best known is the "English" Oak (Quercus Robur), which is indigenous to the milder parts of Europe; its northern limit almost coinciding with that of successful wheat cultivation. In appearance it somewhat resembles our white oak, but is usually more gnarled and twisted. When the trunk becomes hollowed by fungous diseases and fire its growth is exceedingly slow; many of the ancient oaks remaining in England dating from Saxon times and possibly earlier. The heartwood is of a dark brown to pale yellowish-brown color, sapwood lighter in color, close-grained, weighs 48 to 55 pounds per cubic foot or even 60 pounds, very slowly grown material, not liable to split and works fairly well. Under cover it is practically indestructible and under water it is very durable, thus making it a favorite ship-building material until teak (Tectona grandis) began to displace it for that purpose. European oak is also in demand by wheelwrights, wagon makers, cabinet-makers and carvers. The European oak makes an excellent grade of charcoal for metallurgical work; the Sussex iron (formerly regarded as the best produced in Britain) being smelted with oak charcoal from the great woods of the adjacent Weald until the supply of wood was exhausted.

The "bog oak," found submerged in peat bogs is very dark in color, of unknown age and is largely used in decorative art work.

Turkey Oak (Quercus Cerris) is a tree with a wide-spreading crown, downward curving branches and heavy fine-grained wood with an attractive figure and much prized for carving and the manufacture of furniture.

Oak Bark

From time immemorial the bark of various oaks has been used for tanning purposes, and the consumption of oak bark in the United States alone amounts to 445,000 cords per annum. Oak bark is used for the better grades of leather; hemlock bark being restricted to the poorer grades. According to Sargent, dressed European oak bark contains 14 per cent. of tannin; eastern live oak (Quercus Virginiana) 10.5 per cent.; Spanish oak (Quercus digitata) 8.6 per cent.; chestnut oak, 6.2 per cent.; white oak, 6.0 per cent.; black oak, 5.9 per cent.; and red oak and burr oak each 4.6 per cent.

Other Products

In most European countries the acorns on the ground have furnished food for swine from the earliest time and in Saxon times the "mast" seems to have been regarded as the most valuable product of an oak wood, and even at the present time large herds of swine in the German forests depend upon acorns for their sustenance during the autumn months.

The cork used for stoppers for bottles, etc., is obtained from the bark of the Cork Oak (Quercus Suber), a native of the western Mediterranean area. Every few years the outer layers of bark are removed so as not to injure the growing inner layer. After steaming to soften them, the slabs or "cams" are graded and sold to be cut up into corks and used for other purposes.

Oak galls (formed by the injuries caused by insects) were formerly collected for the manufacture of writing inks; the Aleppo galls (obtained from Quercus infectoria) being considered the best. The tannin in the oak galls combines with iron salts to form the "ink."

Quercus coccifera, a small bushy oak found in Spain and other countries around the Mediterranean is attacked by one of the scale insects (Coccus ilicis) and yields a red dye known as "Kermes dye," which was used quite extensively until displaced by cochineal.

The twigs of Quercus persica and Quercus Vallonia are attacked by another species of Coccus which causes them to exude a sweet substance which is collected by the Kurds and used as manna or as a substitute for honey or sugar in various confections. The agglutinated tears of manna are collected at sunrise by shaking them onto linen clothes spread out beneath the trees or by dipping the small branches into hot water and concentrating the solution as in the manufacture of maple syrup or maple sugar.

An Interesting Shipment of B. C. Timbers

The accompanying illustration represents an interesting shipment of Douglas fir timbers recently made by the Canadian Western Lumber Company, Fraser Mills, B. C., to the Polson Iron Works, Toronto. The shipment consisted of four octagonal pieces of Douglas fir 30 in. in diameter and 72 ft. long; one piece 16 in. x 16 in. x 74 ft.

Long timbers shipped by Canadian Western Lumber Company.

long and one piece 14 in. x 14 in. x 86 ft. long. In order to transport these long timbers from British Columbia to Toronto it was necessary to use, as shown in the illustration, two steel frame flat cars each 41 ft. long. The timbers are being further manufactured by the Polson Iron Works, Toronto, into masts for a large dredge which is being constructed for the Department of Railways and Canals to be used in connection with the Hudson Bay Railway terminals at Port Nelson, Man.

The Supreme Grand Master of the Sovereign Great Priory of Canada, Mr. P. D. Gordon, of the firm of Mason, Gordon and Company, Montreal, presided at the 32nd annual convention of the order held recently in Montreal. The Grand Master reported 145 Sir Knights had answered the call of the flag by going to the front, 90 per cent. of these going as officers in the Canadian forces. He had visited eighteen preceptories west of the Great Lakes, travelling over 10,000 miles, and his appeals had resulted in $5,313 being subscribed, $1,000 of which had gone to tht Red Cross Society and the balance to the Canadian Patriotic Fund.

A deputation of prominent lumbermen from the States of Oregon and Washington appeared before the Federal Trade Commission at Tacoma, Wash., recently and made an urgent appeal for governmental aid to the industry. Three remedies for the present unsatisfactory state of the industry were suggested by the lumbermen:—(1) Legislation to permit a combination to control and limit production; (2) Legal sanction of a lumbermen's selling agency which would advance the price in foreign markets; (3) Reducing the burden of taxation upon the lumber industry.

The Market for Pit Props in England

Details of Requirements of the Coal Mining Industry — A Permanent Opening for Canadian Goods Not to be Expected

Mr. H. R. MacMillan, Special Trade Commissioner for Canada to Great Britain, who is making a study of market conditions in connection with Canadian wood goods reports under date of July 28th as follows:—

The coal-mining industry of the United Kingdom is dependent upon the importation of pitwood. In the year 1914 there were imported 2,476,854 loads of 50 stacked cubic feet each (equivalent to 967,517 cords). The total value of the importation was $15,644,860, averaging $16.17 per cord at the British port of entry. The imports came chiefly from Russia and France which supplied respectively 38.5 per cent. and 29.8 per cent. of the total; other nations contributed in the following proportion: Sweden 12.3 per cent., Portugal 11.9 per cent., Norway 5.4 per cent., Spain 3.9 per cent. Amongst a small total shipped from other countries is 2,485 cords from Newfoundland.

The reported imports given above include only the round or hewn timber imported especially for pitwood. Very large quantities of sawn pitchpine in sizes from 4 inches by 4 inches up are used for timbering in the collieries.

There are over 3,922 collieries in the United Kingdom, located in six important coal fields: South Wales, Midland, Lancashire, Yorkshire, Northern, and Scottish.

These coal fields with the exception of South Wales, draw their pitwood chiefly through ports on the East Coast of England and Scotland, the most important of which are Grimsby, Hull, Sunderland, Tyne, Leith and Granton. These ports are both closer to the European sources of pitwood, and farther from Canada than are Cardiff, Swansea, and Newport—the chief ports of the South Wales coal field, and for this reason trade may be possible with the South Wales coal field, which is impossible with the other coal fields. Props for the Lancashire and Yorkshire fields are occasionally imported through Manchester.

Two important classes of round wood are used in South Wales collieries, cogwood and propwood.

Cogwood is two feet and up in length, three inches and up in diameter. Any rough wood will do. It is used for building crib supports where props will not stand the pressure. The price in normal times, $3.75 per ton weight (c.i.f. Welsh port) prevents any possibility of shipping this material from Canada.

Classes of Props Used

Two classes of props are used in the Welsh coal fields, the Baltic and Pinaster or Maritime pine from France, Spain and Portugal.

Maritime pine supplies the greater part of the Welsh trade. It corresponds somewhat to Canadian jack pine in appearance and texture. It is rough and apparently is cut from tree tops and from topped trees. The sizes are larger in this timber than in the Baltic, averaging six to ten inches in diameter. These props are now cut in France by women. It is not considered necessary to peel them. The price is in normal times 15s. to 20s. a ton f. o. b. French port, and the freight to Wales is in normal times about 5s. per ton. About three tons is considered equal to one cord. On this basis the f. o. b. price is $10.80 to $14.40 per cord and the delivered price is $14.40 to $18 per cord. During the war the price due both to difficulty in cutting the timber and to higher freights has been over $20 per cord delivered.

The term Baltic in this trade applies to all spruce props from Scandinavia and Russia. These props are peeled and are usually quite straight, and come in sorted sizes 2½ inches to 6 inches top diameter. These props in normal times sell for 40s. a fathom of 216 stacked cubic feet f. o. b. Baltic ports and the normal freight to Wales is 30s. a fathom. On this basis the f. o. b. price is $5.69 per cord, and the delivered price is $8.76 per cord. During the war this supply has been seriously curtailed and the price has risen to as much as $13 per cord c. i. f. Welsh port.

Opening for Canadian Shippers of Lumber

The two classes are not used interchangeably. Some colliery operators use both, and some use only the one, preferring the Baltic to the Maritime pine or vice versa. The only chance for Canadian shippers lies in competing with the Baltic. Operators in the Welsh coal fields will now accept Canadian white or black spruce, balsam fir or jack pine props if they can be delivered to the usual ports for the same prices as the Baltic.

The lengths used in the Welsh coal fields are 6½ feet, 9 feet, and 13 feet. Any timber greater in diameter than 2½ inches at the small end will be accepted. Canadian timber should be peeled to save freight space. The Baltic timber is not peeled quite clean; the bark appears to have been shaven off with a sharp spud leaving a portion of the inner bark, to which no exception is taken. The ends of the props should be cut off square with a saw, otherwise the prop penetrates the gallery roof.

The prop and pitwood business is handled by merchants many of whom own ships, buy the props free on board, pay the shipper by sight draft, arrange for the transport, and deliver the props to the colliery trucks at the coal shipping port. Any one interested in the trade in the Welsh field should take it up with the pitwood importers and merchants, a list of whom is on file in the office of the Commissioner of Commerce. (Refer to File No. A 976.)

Imports of Pitwood from Newfoundland

This firm is prepared to contract for a cargo of 1,200 fathoms or 2,025 cords of peeled props, f. o. b. their vessel in any ice free Nova Scotian or New Brunswick port, for October to December loading at a free on board price of 35 shillings a fathom, or approximately $4.98 per cord. The props should be cut according to the following specifications:—

Top diameter: 2½ inches to 5 inches. Length: 6½ feet, 7½ feet, 9 feet.

Spruce, balsam and for jackpine, bark to be removed.

The name of this firm is on file with the Commissioner of Commerce. (Refer to File No. A 976.)

Such props as Canada would produce sell in normal times for about $8.75 per cord c.i.f. Welsh port. If freight in props from the Maritime Provinces to Welsh ports were based on 30 shillings per cord, practically nothing would be left for the shipper.

Those who look forward to the time when the exhaustion of European forests will lead to an increase in the timber trade from Canada, should remember that Northern European forest countries after supporting a fairly dense population for hundreds of years, and after engaging in a large timber export trade for 200 years, can still sell peeled pit props f.o.b. for $5.68 per cord. European forests have been much better protected from fire than the forests of Canada, and as a result are still productive and capable of supporting a very great export trade. If the necessities arising from the war caused the Baltic countries to impose an export duty and severe competition as regards Atlantic freight rates reduced the cost of delivery the position would be modified in favour of Canada; but under present conditions there does not appear to be a permanent opening for Canada in the pitwood trade.

The Reorganization of Hoo-Hoo

The Supreme Nine of the Concatenated Order of Hoo-Hoo have issued a special edition of The Bulletin, containing a full report of the recent investigation into the affairs of the Scrivenoter's office. The issue also contains a report of the Death Emergenry Fund; Program of the 24th Annual Meeting to be held in San Francisco September 9th to 11th, and a description of the Lumbermen's Building and House of Hoo-Hoo, on the grounds of the Panama-Pacific International Exposition, which will be the headquarters for the Annual Meeting. There is also a report of all recent Concatenations.

The editorial section of the special issue of the bulletin contains an article signed by Bolling Arthur Johnson, Seer of the House of Ancients, and E. D. Tennant, Snark of the Universe, giving a report of the joint meetings of the Supreme Nine and the House of Ancients, held in Chicago on February 23rd; also a full explanation of the special assessment that was made. The report states that the Scrivenoter's office has been reorganized and is being conducted on strict business principles. Plans are being prepared to incorporate the Order after this year's annual meeting, thus making the Order liable in cases of financial difficulty, instead of each individual member. Financial reports show that the Order was never in a better condition than at present. On July 1st, 1915, 6,082 members had paid their dues up to September 9th, 1915; 2,398 had paid their dues up to September 9th, 1914, and 1,768 up to September 9th, 1913, making a total of 10,248 active members.

The report, which is extensive and complete shows that a thorough clean-up of the order's business affairs has been affected. It is expected that there will be an exceptionally large attendance at the 24th annual meeting from September 9th to 11th and that the organization will then be put upon a permanent and sound business basis.

Reports from British Columbia state that the export trade in lumber with the United Kingdom is steadily on the increase and that many large vessels are loading continually for this business.

British Columbia Marketing Problems

A CONSIDERATION OF CONDITIONS WHICH MUST BE REMEDIED TO BRING ABOUT A NORMAL PRODUCTION ANNUALLY OF FIVE BILLION FEET.

J. G. Robson, New Westminster, B. C.

Below we publish a very interesting address delivered recently before the Associated Boards of Trade of Southwestern British Columbia at a convention held in New Westminster, the speaker being Mr. J. G. Robson, vice-president of that body and also president of New Westminster Board of Trade. As head of the Timberland Lumber Co., Ltd., New Westminster, Mr. Robson is well qualified to speak for the lumber industry in view of the fact that—despite the depression—his company has been able to operate its sawmill continuously twelve hours per day for the past eighteen months, while many other concerns have had to close down or reduce the working hours. His statement that the annual lumber cut of the B. C. mills should be five billion feet, instead of around one billion feet as at present, is based on the assumption that this output is necessary to offset the yearly wastage of timber by fire and natural deterioration. The claim probably is well-founded; the fire damage may be estimated in great part, but who can place a value upon the annual deterioration of over-mature timber? Certain it is that already some of our limit-holders have had cause to fear that deterioration has set in here and there in their old-growth timber, and the only remedy therefore is speedy manufacture into lumber. With wider markets an increased cut could be taken care of, and it would seem that the war may create the demand needed. Just what a pay-roll of $65,000,00 in the lumber industry would mean to this province can scarcely be grasped, but it is not improbable. Mr. Robson said:

The province of British Columbia has standing to-day something in the neighborhood of four hundred billion feet of merchantable timber, consisting very largely of fir, cedar, spruce, pine, hemlock and larch. The age of this timber, at maturity, runs from 50 to 700 years. Our fir, which is of world demand, commands a very large place in this four hundred billion. Cedar, spruce and pine are of about equal quantities. All of these four woods find a ready sale in foreign markets and will yet form the basis of a large export trade from British Columbia. Forty per cent. of this timber is now mature, or will be within the next twenty-five years, and if not removed within a reasonable time will deteriorate considerably. Another forty per cent. of this timber, which is naturally slightly lower than the rest in grade, is at the present time inaccessible owing to the lack of railroads and the high cost of logging against the low prices being obtained for lumber, and will naturally form a large reserve for many years. Lumber, being conceded the leading industry in the province, has at the present time a normal output of about one billion feet, employing directly and indirectly, about fifteen thousand men, amounting to an annual pay-roll in the province of about $13,500,000. Added to this would be at least about another $1,500,000 for the shingle industry, which is really part of the lumber business as generally understood, giving the province about $15,000,000 annually in wages. Besides this is the general business built up around this industry, and through which this $15,000,000 passes. Our annual output, to keep within our supply after allowing for waste by fire and watershed reserve, etc., should be at least five billion feet, which would give employment to seventy-five to eighty thousand men, with an annual pay-roll of sixty-five millions of dollars.

The Employment of Orientals

A great deal of criticism has been heard from time to time, from different sources, against employers on account of the Oriental labor employed by the mills of this province, but the lumbermen feel that a large part of this criticism has been due to lack of knowledge gained from actual experience in this line of operation in this particular province where for many years the labor situation has been anything but helpful to the manufacturer, owing to the very fast development creating a higher scale of wages than is paid in any other part of the world for similar work. This situation is very rapidly changing and at the immediate moment the cause of the use of Oriental labor is not the fact that white men cannot be secured at a reasonable wage, but that the industry is in such weak condition and prevailing prices are so low that it is an absolute necessity for the lumber manufacturers to use the cheapest possible labor or close down their plants. A careful study of the quantity of Oriental labor used by the lumber industry here would show that only one out of every three or four employees, from the stump to the finished article on the car, is an Oriental, and that were it not for the fact that Oriental labor at the present time can be got at a ridiculously low figure, the two or three white men who make up the percentage along with him would necessarily be laid off. At the very best it is simply a "break even" condition, and were the manufacturer to employ a white man in this Oriental's place it would simply mean that he would have to shut down entirely. We are glad, however, that the near future seems to contain very good prospects of a large amount of this Oriental labor being replaced by white labor when the lumber industry settles down to its normal basis again, and no class will be better pleased than the lumber manufacturers themselves to see this condition prevail.

A Wider Market is All-Important

The great problem of the lumber industry is the marketing of our product. Under normal conditions such as we enjoyed in 1913, ninety per cent. of our output is disposed of in what are known as the rail markets, these being largely the Prairie provinces of Western Canada, the other ten per cent. being shipped to the different export markets of the world, such as South Africa, Australia, New Zealand, Japan, China and South America. Owing to the war conditions now existing it is next to impossible to get boats to carry this cargo trade, hence the ten per cent. also looks for the rail markets, and now, above all times, does this help to create the ridiculously low prices prevailing, as the consumption at the present time is only about thirty per cent. of normal in the Prairie provinces, leaving a very large percentage of our daily output to be either cut off or dumped on any market that can be reached by rail. The production of the province at the present time is only about thirty-five to forty per cent. of normal, meaning a serious loss to our general business. By this will be seen the extremely urgent need for market extension and the only possible relief is the foreign markets such as above mentioned. The lumbermen of the province are duly thankful to the Provincial Government for appropriating fifty thousand dollars this year for market extension but it seems very necessary to go further than this and remove if possible the handicap which British Columbia manufacturers are under in the matter of boats in which to ship our product to all available water route markets as at the present time the lumber carrying boats available on the Pacific are very largely controlled in San Francisco. In California, Oregon and Washington producers have considerable advantage over us, both in a slightly better freight rate and also in the old established channels of export trade which have been through San Francisco for many years, until such time as we are able to secure boats quickly and at a competitive rate we cannot hope to break far into the export trade. As a sample of this, during the year 1914 British Columbia supplied only four per cent. of the imports of Australia in Douglas fir, the rest being shipped by our competitors to the South of us.

B. C. Lumbermen Must Control Vessels

Another point that helps the Washington and Oregon lumber exporters is the fact that they have a much larger demand through the United States for their highest grade clear lumber on which they receive rather handsome profits, and in this way they are able to give practically cost price to the export trade which takes their lower grades. This advantage is not yet realized from the Canadian trade, and consequently the lumbermen here are often forced, on export inquiries, to give a slightly higher price than our American competitors in order to break even. The only solution seems to be for the governments either to construct or subsidize a line of lumber carriers from British Columbia ports. To show what this really means we quote the following extract from a letter from a firm in Sydney, New South Wales, under date of May 8th, 1915: "We have, in a recent instance, endeavored to charter with the option of loading at British Columbia, but the owners ask advance rates, and if the current high rates are to continue for any length of time it might

be advantageous for the mills in British Columbia to own some vessels which they could keep in the trade."

If British Columbia lumbermen had equal freight advantages with Washington, Oregon and California, we could develop an export trade of a billion feet in a few years. The export of Oregon and Washington during the year ending June 30th, 1914, in fir alone was six hundred and eighty million feet and the other countries competing for general cargo lumber trade are fast depleting their supply of standing timber which is going to leave a large opening for some one. But we must be in condition to compete as the trade grows.

Where Our Governments Have Erred

Another thing which has hurt the lumber industry here to some extent is the fact that the Provincial and Dominion governments have not always insisted on Canadian woods (where suitable) being used in Government work or in the work of construction and maintenance carried on by different parties and companies subsidized by the Government in any form or under government control. This has resulted in the use of many millions of feet of American lumber in the last few years by such parties and when we remember that for every thousand feet brought in that could be manufactured here we are paying out an average of about twelve dollars in wages it seems a crime that such things should be allowed to continue. Our annual imports during the past five years of lumber which could have been supplied by the British Columbia mills amount to about two hundred million feet, meaning that in wages we paid the mills on the American side approximately two and one half million dollars on their pay-rolls. We are glad to say that at the moment the importation is considerably lighter but this of course is only due to the extremely low prices prevailing in the Canadian markets. Looking into the future, however, the prospects for the lumber industry in British Columbia are very good. With proper water transportation facilities, which we hope the government will find some means of affording us, that branch of our industry will largely prosper. Our Eastern Canadian trade is gradually increasing, and particularly on our higher grades of lumber, where the very high rate of freight existing has not the same effect as it has on lower grades. Our Prairie provinces, of course, will be our great market, and the probabilities are that within the next few years the increase of trade in that territory will be from one hundred to two hundred per cent. so that within a reasonable time, through the advantages that we can naturally expect, the general development of our whole Canadian market, coupled with the foreign trade which we simply must get, our province will be producing five billion feet annually which she has in store for the lumber consumers of the world.

The Fire Situation in British Columbia

The Minister of Lands of British Columbia reports that with the exception of the Hazelton and Prince Rupert districts, where rain made the position comparatively secure, the weather during the second week in August was hot and dry, and very favorable to outbreaks of fire. In the Tete Jaune division all fires had been extinguished with the exception of one north of Berg Lake, Mount Robson Park, where intermittent strong winds added to the task of the fire-fighters. From Fort George, Nelson and Cranbrook districts, reports show that all fires had been extinguished or were under control, without serious damage being done. The hazard in the Lillooet section was great, owing to occasional strong winds, and similar conditions prevailed in the Kamloops district. Twenty-five thousand feet of timber were burnt as a result of two outbreaks in the Kettle Valley, and six other fires were fought in the Vernon forest district. Intensely hot and dry weather accompanied by light winds from the south were responsible for an exceedingly dangerous situation in the Vancouver district, where no fewer than 48 fires were fought, the area burnt over being approximately five thousand acres, principally slash. Much damage was done to property, including destruction of two houses in the Fraser Valley, and cabins in Burnaby and North Vancouver. The fires at Gordon Pasha Lake and Siamond were burning fiercely and beyond control, but the efforts of the fire-fighting crews had been successful with these exceptions, and further damage had been averted. The western divisions of the Island forest district reported no fires, but there were several fires around Parksville, one serious outbreak near Courtenay, and two on Denman Island, which were being fought. Fires on the Islands between Nanaimo and Ladysmith were under control. In conclusion, the Minister reports that the drying up of vegetation, and the lack of rain, are increasing the fire hazard, and only by dint of the utmost care and precaution with fire will destruction of life and property, and heavy outlay by public bodies and private individuals be avoided.

Reports from Chatham, N. B., state that shipping activity on the Miramichi is very extensive this season and that large quantities of lumber are being moved for export.

B. C. Trade Showing Good Progress

In a general review of the present position of the timber industry of British Columbia, and of its outlook, Hon. W. R. Ross, Minister of Lands, writes in part as follows:—

The cut of logs for the past three months is just as large as for the same period last year, before the war started. This is probably unique, as except for the production of munitions very few industries in the world have maintained their production. The United States has not been able to do it. As many camps, possibly more, are running now as there were last year, before the outbreak of war. Some 7,000,000 feet of logs, mostly low-grade, cedar and hemlock, are being exported every month, thus affording relief for the surplus cut of logging camps and giving employment to many men who would otherwise be idle, the treasury also deriving a revenue of over $9,000 a month from this source.

Constructive work by the Department in dealing with the Crown timber reserve is shown by the fact that the revenue from current timber sales has more than doubled this year, as compared with the same period last year before the outbreak of war—another evidence of the value of our great timber reserve. Constant additions are being made to this, as, for instance, is shown by the report of a cruising party just returned from the Salmon River country on Vancouver Island, where fifty square miles, carrying in themselves as much timber as the whole province cuts in a year, were found in one block alone.

Turning to the sawmill business, there are two main troubles: 1st, poor prices; second, lack of transportation. The seriousness of the latter is shown by the fact that in three months, April, May and June, ninety-eight lumber-carrying vessels were chartered by American interests on the Pacific Coast. There interests have secured a strong monopoly on this class of shipping. In that time only two lumber-carrying vessels were chartered in British Columbia, and these were small sailers. As for the 170 steam schooners engaged in the Pacific coast lumber-carrying trade, I understand that all of these are owned on the American side, one-third of them by the American sawmills themselves. As far as I know none of them are owned in this province.

With the fine system of inland transportation we now possess (and more railways nearing completion) there is this serious breakdown in transportation from the coast seawards. The need of ocean transportation is, therefore, one of the most vital problems before British Columbia at the present time. If American shippers can do this export business, even under severe war conditions and high tonnage rates, there is no reason why British Columbia should not secure her proper share of lumber exports.

This Summer the effort made by the Provincial Government in co-operation with the Department of Trade and Commerce, has already had a very decided effect upon the situation. By establishing connections with the various departments of the Imperial Government War Office, Admiralty and Public Works—the Government have been able to secure for British Columbia mills seven cargoes of lumber totalling over 20,000,000 feet. The circulation of a quarter of a million dollars through our saw-mills, logging camps, merchants and shipping interests is thus a most promising beginning to the Government's compaign for export markets. This, in itself, in three months, amounts to more than half the total export of lumber from the province in the preceding year.

I have so far referred only to the Coast lumbering industry, which is in a far better position than the industry in the Interior. The mountain mills have been suffering severely, since they depend so greatly upon the Prairie market, in which the demand for lumber has been very greatly curtailed for some time past. The need for action is shown by the decrease of nearly forty per cent. in the output during the past four months, as compared with the same period last year:

I am glad to say that there is a good prospect of improvement being effected by the combined action of the Government and the Interior sawmills. It has been demonstrated that a systematic advertising of lumber can greatly increase its use. I am, therefore, pushing forward as quickly as possible the advertising campaign, preparations for which were begun early this Summer. This campaign aims at presenting to the farmer the arguments for better farming—gives him building plans for barns, implement sheds and all other farm buildings—tells him just what to use and how to use it; makes it easy for him to get all the information he needs. Better farming will mean a far larger consumption of wood—a steady demand—not the spasmodic demands of city building in the way it has been in the past. The Department will follow up the general advertising campaign by general work, through agricultural associations, meetings, exhibitions, etc., and will co-operate with the salesmen and British Columbia mills whose markets are found in the prairie provines.

Future of the Western Lumber Industry

B.C. Overstocked with Mills—Value of Our Woods Becoming More Widely Known—Export Trade Has Promising Outlook

In response to a request for an article dealing with the present condition of the British Columbia lumber industry and the future outlook, Mr. John Hanbury, president of the John Hanbury & Co., Ltd., Vancouver, prepared for us the following thoughtful review of the causes which, in conjunction with the war, have, in his opinion, led up to the prevailing depression. While very frank in placing the blame where it belongs, according to his judgment, Mr. Hanbury is just as frankly an optimist when he deals with the future of our lumber industry and the trade opportunities awaiting our manufacturers. He says:

"I am sorry to state that, owing to several conditions occurring during the past few years, we find the lumber industry to-day in anything but a flourishing condition, though the evils existing can, and will be remedied, we hope, in the very near future. A few years ago, Western Canada experienced a period of rapid development and the lumber industry was very prosperous. The building of the new transcontinental railway created a great demand for lumber, and the industry looked so inviting that we soon found ourselves in an era of overbuilding of sawmills. To make matters worse, many of these mills were managed by men who had little or no experience in lumber business, which made conditions hard for the practical lumbermen. Many concerns were taken over by brokers and promoters who had no real interest in the welfare of the business. Companies were organized and over-capitalized and the stock sold to an unsuspecting public, these mills becoming so heavily burdened with interest charges that they could not be operated to produce profits. They have thus become unfair competitors for the smaller individual manufacturer trying to do business on a legitimate basis.

"We have in B. C. to-day enough mills to produce annually two billion feet of lumber, while the greatest demand ever required was about one billion. Hence, it can be readily seen that we have need for more intelligent cohesion among the manufacturers of our province. There is a field large enough for our wood products, and the facilities are here, but the quality and varied uses of our woods are but little known to the outside world. It is time for the lumbermen to stop this cutting each other's throats by useless competition and to organize their plants so that they can operate on a business basis, that is to say, sell their products for a little more than the cost of production.

"The present condition of the trade is much more hopeful than it has been for three years. The war has led to an increased demand for mill products, and we believe this demand will be greatly increased after the war. A large export market is open to us to-day, but we cannot get transportation. Inquiries are being made from the United Kingdom regarding our facilities for providing portable houses for the rehousing of the population in Northern France and Belgium, though there will be little of this business till the war is over and transportation possible. But we should be organized and advertised, so that we may be ready when the market opens.

"Government statistics tell us we have about four hundred billion feet of merchantable timber in British Columbia, and in addition to this there are large areas of good timber in Northern Alberta and Northern Saskatchewan. In British Columbia every time a mill cuts one thousand feet of lumber the government collects an average royalty of seventy-five cents, so that the development of this—our greatest natural resource—is of immense value to the people. The lumber industry employs so much labor that its prosperity ensures the general prosperity of the province, as it keeps such large sums of money in circulation at home.

"The splendid quality of our fir wood has only begun to be recognized. It is a semi-hardwood that lends itself to many purposes. When properly selected it is a beautiful wood for interior finish and a close competitor with oak and mahogany at a much lower price. People are just beginning to realize the possibilities of our western hemlock. It is destined to take the place of eastern pine for very many purposes. Our pulp and paper mills have done great things with it already. This latter industry alone is producing three million dollars annually, and it is only in its infancy. Box factories form another phase of the lumber industry, and for their product there is a great market, both domestic and foreign. We have on the Coast some splendid sash and door factories, and we feel satisfied that our fir doors can compete favorably with any doors in the world. But for this product our market has been too limited, and now that the foreign markets are opening for us we cannot secure transportation. The shingle business is no small factor in the lumber industry of this Coast, one thousand million shingles having been marketed in one year by our local mills. The quality of our cedar is universally acknowledged as the best on this continent. We look for a lively period of immigration to follow the war, and the development of our Western Canadian farm lands should greatly stimulate the lumber industry. With our three transcontinental railway lines our overland transportation facilities are unsurpassed.

"Owing to our lack of shipping facilities our mills have been forced to bid on British government orders through a San Francisco agency. But last year our local provincial government voted $50,000 to assist in developing the foreign trade. Our Forestry Department is now working in conjunction with our Lumber Manufacturers' Association to organize a Selling Agency to take the entire charge of our export trade and apportion it among our various mills. The prosperity of the province is so dependent upon this industry that it seems a wise move for the government to co-operate with the manufacturers in an endeavor to improve the conditions of this trade.

"We are now seeking from the Australian government a preferential tariff on our lumber, and we feel that in view of the splendid contributions made to the war by Canada, both of men and money, the British government should, as far as possible, make all her purchases in Canada. Mr. H. R. MacMillan, our Chief Forester and Trade Commissioner, is at present in England looking into the question of our foreign markets. Canada is such a huge country, and we have so small a population and so little idle money, that we are not wealthy enough to put up the advertising campaign necessary for the success of our industry. The plants are here, perfectly equipped for the work; the raw material is varied and abundant. We only need an increased market and export facilities and the lumber industry will once more revive and prosper. I would like to advise that the Dominion and Provincial governments might assist this advertising campaign by placing in architects' offices, in all the principal cities of Europe and the various British Colonies, samples of these finished woods of British Columbia.

"There seems to be an opening in Vancouver for a shipping concern owning boats for trans-Pacific trade, for, even should the war end in a few months, the revival of trade which is sure to follow will require much better transportation facilities. The recent opening of the Panama Canal promises a great volume of business via the Port of Vancouver, and opens to our British Columbia industry many new markets. Inquiries for our forest products are now coming in increased numbers from the British West Indies, New Zealand, Australia and the United Kingdom.

Western Trade Much Improved

W. G. Moore, president of the Empire Lumber Company, Victoria, B. C., reports that the lumber situation today is greatly improved as compared with three months ago. Mr. Moore has been spending some time at Cowichan Lake, where his company's limits are situated, and states that "while conditions are just beginning to improve, there is a notable change in the opinion of lumbermen, the spirit of pessimism giving way to one of optimism. The mill at Genoa Bay will be busy for some time, and while we shall not cut our own logs, as the camps are closed, it will enable us to use up a considerable quantity of material on hand, like every other mill on the Island. Nothing will be done at Crofton till there is a complete change in lumbering conditions in British Columbia. We have no object in building a mill when as satisfactory relations prevail as those under which our logs are cut at Genoa Bay. Crofton, however, is an ideal site for a mill, and sooner or later it will be built."

Mr. Moore spoke of the promise of the Island lumbermen of sharing in admiralty orders, and expressed the opinion that the anticipation of this activity had much to do with the growing optimism.

Never was the scarcity of shipping for offshore charters brought to the attention of British Columbia shipping men more forcibly than by the chartering of the schooner Roy Somers to transport lumber from North Pacific ports to Sydney, Australia. The Somers is to receive 95 shillings per thousand feet, and has been taken by the S. E. Slade Lumber Company. The craft is of but 298 tons, and has been running between Grays Harbor and San Francisco for several years. It is the first offshore trip for the craft, and she is possibly the smallest carrier which has ever attempted the trip to the Antipodes.

Reports from British Columbia state that the export trade in lumber with the United Kingdom is steadily on the increase and that many large vessels are loading continually for this business.

Forestry Report for 1913

The annual report of the Director of Forestry for the year 1914 has been published by the Department of the Interior. In the introduction to his report Mr. R. H. Campbell, Director of Forestry, states that the fire situation during the past year has been a satisfactory one. In the Forest Reserves the area burned over was only two one hundredths of one per cent., and in the area outside of Forest Reserves nine one hundredths of one per cent. This satisfactory result is due partly to the favorable weather and partly to the improvement which has been made in the personnel of the service. A decided advance has been made in the matter of brush disposal in lumbering operations.

During the year 1913-14 the appropriation for the work of the Forest Branch was $556,713, which was increased to $571,798 by refunds from timber holders for their proportion of the fire-fighting expenditure.

Statistics of production for the calendar year 1913 are included in the report; among them being the following:—

Canada produced in 1913 a total of 3,816,642,000 board feet of sawn lumber, valued at $65,976,438; 739,678,000 lath, valued at $1,783,283; and 1,485,279,000 shingles, valued at $3,064,641.

The total quantity of pulpwood produced was 2,144,064 cords, valued at $14,313,939. Of this over half was exported in the unmanufactured state to the United States, and the remainder, 1,109,034 cords, was manufactured in Canada into wood-pulp, producing approximately 854,624 tons of "air-dry" fibre.

The railways of Canada in 1913 purchased a total of 19,881,714 cross-ties, valued at $8,740,849; of these ties over sixteen per cent. were reported as having been imported from the United States. Over ten per cent. of the ties purchased were treated with preservatives before being laid in the road-bed.

Pole-line companies purchased 534,592 wooden poles in 1913, valued at $1,188,331, eighty per cent, of which were the product of Canadian forests.

Mining companies used 34,802,000 lineal feet of round mining timbers at a value of $509,602.

The following is an estimate of the total value of forest products in Canada for the calendar year 1913:—

Lumber, lath and singles	$71,000,000
Firewood	55,000,000
Pulpwood	15,000,000
Fence-posts and rails	10,000,000
Cross-ties	9,000,000
Square timber exported	500,000
Cooperage	1,900,000
Poles	1,800,000
Logs exported	900,000
Tanning materials	20,000
Round mining timbers	600,000
Miscellaneous exports	400,000
Miscellaneous products	11,000,000
Total	$177,120,000

Great Britain's Imports for Six Months

Imports of wood and timber into the United Kingdom during the six months ending June, 1915 and 1914 were as follows:—

	1915		1914	
	Quantity	Value	Quantity	Value
Wood and Timber (hewn)—	Loads	£	Loads	£
Russia	1,485	4,203	69,905	208,401
Sweden	3,456	11,537	17,936	46,432
Norway	15,513	51,581	12,948	34,279
Germany	.....	.....	19,486	79,822
United States	71,496	423,868	104,200	555,148
British East Indies	17,588	340,508	14,802	287,565
Canada	5,241	28,231	12,435	84,579
Other countries	5,054	68,724	20,743	223,929
Total	119,833	928,652	271,555	1,520,155
Wood and Timber (sawn or split), Fir—				
Russia	65,105	267,215	547,324	1,509,367
Sweden	450,287	1,943,538	328,093	880,017
Norway	203,801	889,742	48,161	177,374
United States	104,262	502,146	171,924	698,299
Canada	237,385	1,016,340	194,636	619,262
Other countries	3,736	27,677	15,678	62,124
Total	1,064,576	4,646,658	1,305,816	3,946,443
Wood and Timber (sawn or split, planed or dressed), unenumerated—				
United States	7,899	65,472	8,857	61,502
Canada	7,993	36,691	19,911	71,509
Other countries	6,767	32,649	24,172	78,348
Total	22,659	134,812	52,940	211,359

French Lumber Requirements

As a result of an interview concerning Canadian timber, the following kinds and sizes of lumber especially required by the joinery trade in France have been forwarded to the Department of Trade and Commerce by the Hon. Philippe Roy, Canadian General Commissioner at Paris:

Spruce— Thickness Metres.		Width Metres.	Oak— Thickness Metres	Width Metres
0.10	x	0.23	0.11	From 0.16 to 0.30 and more
0.08	x	0.23	0.10	" "
0.034	x	0.23	0.08	" "
0.027	x	0.23	0.054	" "
0.027	x	0.32	0.041	" "
0.018	x	0.23	0.034	" "
0.013	x	0.23	0.027	" "
0.027	x	0.105	0.018	" "
0.027	x	0.115	0.013	" "
0.034	x	0.105		
0.034	x	0.115		
0.065	x	0.15	The lengths may vary from 3 to 7 metres and	
0.065	x	0.165	more by fractions of feet.	
0.065	x	0.18		

(1 metre = 39.370113 inches).

In oak, all the widths are admitted; the average width must be at least 0.23.

The widths from 0.08 to 0.12 are also admitted for the floor friezes of 0.027 thickness.

For the lengths, they may vary from 2 metres to 5 metres and more by fractions of 0.25 x 0.25.

It is necessary that samples be sent as well as fixed prices on board railway or boat at Paris.

The Annual Lumber Market of Norway

This year the annual lumber market of Norway, the so-called St. Hans Lumber Market or Exchange, which is held in Christiania in the latter part of June, has been very well attended by out of town parties interested in the market. This exchange lasts for from eight to fourteen days. During the days past the market has been rather quiet and no business of any account has been done, but it is expected that in the coming week some transactions will occur. How the prices will turn out it is as yet difficult to say. The forest owners will try to keep up at least last year's prices, but the buyers will say that it is now still less possible than at any previous time to figure for the immediate future. Shipping is difficult, the freights are very high, and it is not impossible that they will rise still further. Added to this steamers and sailing ships are frequently torpedoed, which even if the cargo is insured against war risk, causes the shippers considerable annoyance and trouble. Besides the shipowners are not much inclined to contract for shipments of lumber and pulp to the countries at war. The running expenses of the pulp mills are enormous; coal, sulphur, and otherwise everything that is used in the manufacturing of pulp is three times as expensive as before. Considering this the pulp prices are poor, and the market is much limited during the war. The Belgium market is lost and the sales to Holland are small. In France the duty on "News" has been abolished, which is now imported ready-made from Norway, Sweden, etc., whereby the price on this article has gone up considerably. Many of the French paper mills have been closed down, the working men being at the front, consequently France has no use for pulp. The prices of cellulose are not bad, although not as high as they should be, compared with the expenses. If now there sets in a water shortage, the work at the mills will have to be restricted, and then likely the prices will be firmer.—Trade and Commerce Report.

Enquiry for Ready Made House Information

War's effect in curtailing United States exports of forest products features the report of lumber exports for the fiscal year ended June 30. It shows that the past year's export of all items under the head of wood and its manufactures decreased 52 per cent., the value being $49,937,653, compared to $103,179,640 the previous year.

The greatest decrease in value was to Canada, which in 1913-14 was the United States' largest customer in lumber, taking 434,399,000 feet. The past year Canada's taking fell to 182,734,000 feet.

Enough Lumber in a Tree to Build a House

The United States Government has received $99.40 in settlement for a single sugar-pine tree which was cut in trespass in the Stanislaus National Forest, in California, and which yielded more than enough lumber to build a good enough suburban frame house. The tree scaled 18,933 board feet, and was valued at $5.25 per thousand feet. This is thought to be the first case on record in which a single tree felled in a national forest was valued at almost one hundred dollars on the stump, although the national forest timber is frequently sold at higher rates.

Machinery and Equipment

What Manufacturers of Logging, Sawmill and Woodworking Appliances are Doing

The Graton & Knight Exhibit at the Panama-Pacific International Exposition

The Graton & Knight Manufacturing Company, Oak Leather Tanners and Belt Makers, of Worcester, Massachusetts, have an especially complete and instructive exhibit of leather belting and leather specialties in their booth in the Palace of Machinery, at the Panama-Pacific Exposition. This exhibit is in three separate and distinct divisions.

The first division represents the complete line of Graton & Knight leather belting, including all their regular brands as well as their Neptune Waterproof and Spartan Steamproof brands. This part of the exhibit is so arranged that visitors may easily inspect each grade of belting displayed.

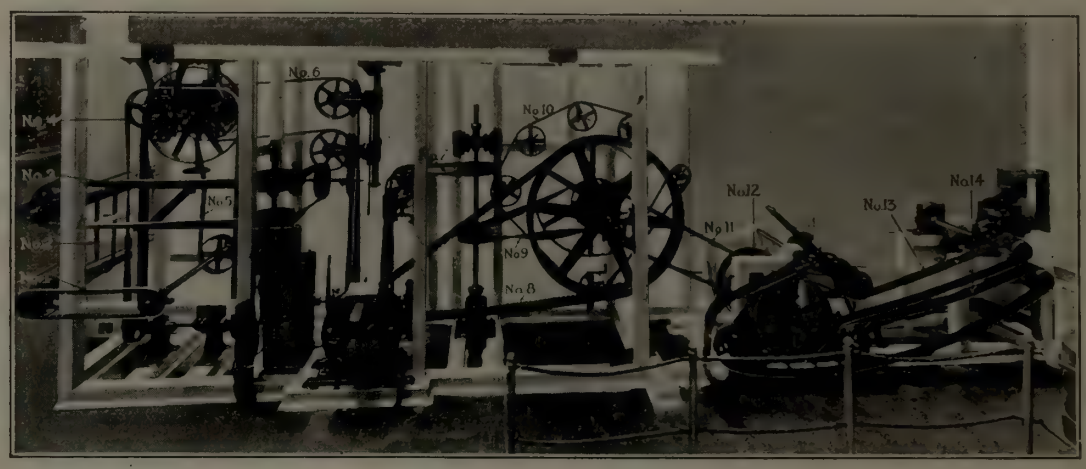
The second division, or Panel Exhibit, is one of the most elaborate exhibits in the Machinery Palace. Here is found an interesting display of various cuts of leather, the company's different brands of lace leather, also round, twist and built-up round belting, all of which is particularly interesting to users of these various products.

It is well known that certain portions of the hide are not suited for belting purposes, yet when sorted and specially finished they are unsurpassed for manufacturing leather sundries. The major portion of this Specialty Exhibit is a demonstration of the manner in which the Graton & Knight people utilize the leather which is unsuitable for use in their high grade belting. It is both surprising and interesting to note the great variety of leather sundries shown, principal among which are automobile and motorcycle leather specialties of every description, strapping for all purposes, trunk handles, leather aprons, packings, gaskets, discs, pump leathers, washers, etc.

In this division is also found a representative showing of shoe counters, soles, welting, and other shoe supplies manufactured by the Worcester Counter Company, also bicycle and motorcycle saddles manufactured by the Persons Manufacturing Company. Both these companies are a part of the Graton & Knight Corporation.

The third division is a running exhibit and is divided into two sections. The first section comprises an operating exhibit of some dozen or fifteen different types of drives. They represent some of the most difficult drives in factory experience, and are all successfully belted, not in accordance with theory, but as a result of many exhaustive tests and sixty-four years' experience in manufacturing leather belting for all conditions of service. The drives shown in the accompanying illustration of this operating exhibit are as follows:—

1—⅞ in. single strand "V" belt drive.
2—Cone drive (textile machinery).
3—Mule drive in horizontal plane.
4—Bicycle drive (cotton mill spinning frames).
5—Vertical drive with weighted idler.
6—Quarter-turn drive with two idlers.
7—Mule drive in vertical plane.
8—Five strand 1¼ in. "V" belt drive reduction ratio 7 to 1.
9—Quarter-turn drive without idler.



Operating exhibit of Graton & Knight Manufacturing Company at the Panama-Pacific Exposition.

Exhibit of the Graton & Knight Manufacturing Company, Palace of Machinery, Panama-Pacific Exposition.

10—Stripper drive—(woolen card).
11—1½ in. single strand "V" belt drive.
12—Matcher head drive (high speed planer and matcher).
13—Upper cylinder drive (high speed planer and matcher).
14—Lower cylinder drive (high speed planer and matcher).

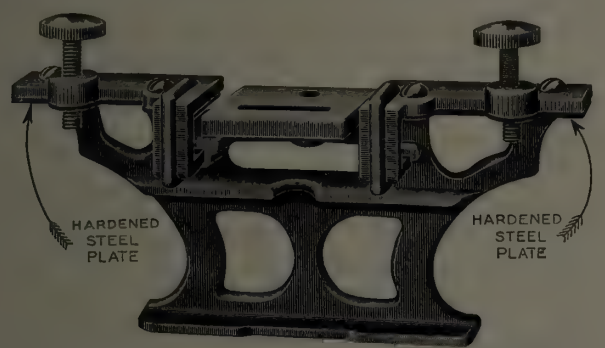
In the second section of this division is a demonstration of the qualities of their Spartan Brand of steamproof leather belting. Two of these Spartan Belts drive through a heat chamber of 200 deg. F., and from there into a bath of oil and water, thereby illustrating the heat, oil and waterproof qualities of the Spartan Brand.

The Graton & Knight exhibit is an impressive showing of their complete line of products, the quality of these products and their various uses. It also convincingly demonstrates their policy not only to supply high grade goods, but to study conditions with a view to furnishing their customers the grade and construction of belting best suited to their individual requirements. To give the trade the best possible service along these lines they maintain a large engineering department thoroughly equipped to analyze any type of drive or any installation, and submit recommendations for the most efficient and economical method of transmission.

The Graton & Knight Manufacturing Company cordially invite all visitors at the Exposition to call at their booth and inspect their goods there displayed. Their representatives in charge will be glad to explain all features of the exhibit and to give suggestions in regard to the particular needs and problems of each visitor.

Can Not Cut Hard Plate

The Cross-cut saw fitter is greatly benefited by the hardened steel plate now being placed on the Simonds Crescent Saw tool directly beneath the main body plate of the tool and in the only place where the teeth rub along. In soft metal, the teeth cut grooves



Important improvement to Simonds Saw Tool.

which alter the adjustment of the tool and interfere with uniform fitting, but the hard plate has practically eliminated this difficulty. These tools are sold by all saw dealers, or by the Simonds Canada Saw Co. Limited. St. Remi Street and Acorn Avenue, Montreal, Que.

J. J. Turner Back from the West

Mr. J. J. Turner, founder and president of J. J. Turner and Sons, of Peterborough, Ont., manufacturers of tents, awnings and lumbermen's supplies, has just returned from a visit to the Panama-Pacific International Exposition at San Francisco. Mr. Turner went out by way of the Canadian Pacific via Vancouver, visiting his different branches en route, and speaks most optimistically of Western Canada, believing British Columbia in particular to have a great future ahead of it in forest and other natural resources. The Canadian Exhibit at the Exposition is, in Mr. Turner's opinion, the finest ever shown by Canada and should prove a great benefit to the country. Mr. Turner was accompanied on the trip by his wife.

New Brunswick Output Increased

The Department of Crown Lands of New Brunswick has given out a report of the lumber cut in New Brunswick during the past winter. The quantity taken out was 287,366,000 superficial feet and the stumpage yield is estimated at $419,000. These returns are greater than last year, when 271,000,000 feet were taken from the Crown Lands by the lumber operators, and are considerably larger than the estimate previously made by the department. The stumpage account is also greater than last year, and exceeds the expectations of the department. In 1914 $394,000 was paid in stumpage. This year there will be an increase of about $25,000. Many of the large operators cut considerably more than was anticipated during the past winter, and as a result their stumpage accounts are larger than in 1914.

Gordon, Grant & Company Ltd., Port-of-Spain, Trinidad, report under recent date as follows:—Lumber—Stocks of pitch pine are being gradually reduced while there is a steady enquiry for both American and Nova Scotian white pine as well as spruce boards.

Average Cost of Logging

The following gives the results of a study by representatives of the United States Forest Service of the cost of delivering logs into Puget Sound. This work is part of the general study of the lumber industry of the Pacific Northwest which is being made by the departments of Agriculture and Commerce.

Average Cost Delivering Logs from Tree to Puget Sound
(Embodying the figures from twenty camps)

Output (1913) and Investment		
Per cent. of total output (approximate)		75
Average year's output per camp (feet)		45,000,000
Average day's output per camp (feet)		200,000
Average fixed investment	$140,000.00	
Average working capital	35,000.00	
Average labor cost per thousand feet	3.09	
Cost per M. Ft., Log Scale		
1. Felling and bucking (labor)		$ .683
2. Woods to car (labor)		1.259
3. Railroad (spur) and pole construction, labor		.586
4. Train crews, labor		.206
5. Dumping and rafting (includes contract work)		.211
6. Supplies and maintenance (labor and material) of railroad, dump and boom		.177
7. Supplies and maintenance (labor and material) of equipment, tools, buildings, etc.		.307
8. Fuel of locomotives, logging engines, shops, etc.		.239
9. Wire rope		.137
10. Depreciation, equipment		.24
11. Depreciation mainline railroad grade, boom and buildings		.066
12. Scaling		.049
13. Return of boom sticks		.046
14. Log freight		.882
15. General expense—		
Salaries and commissions	$0.139	
Taxes	.029	
Industrial insurance	.096	
Sundry expenses	.076	.340
Total average cost per M. log scale		$5.428

This statement does not include the cost of stumpage, interest of any kind, discounts on logs sold, towage to mill, or taxes on standing timber. It is intended here to include only the cost of transforming, transporting, and sorting the logs, taking them to the point of sale for straight loggers. Stumpage and the taxes on timber will be handled in another section of the work. Discounts have been looked on as more closely related to realization than to cost of logging. Interest, whether on capital invested or on borrowed money, complicates the matter of cost and is most clearly considered as related to profit.

The classification of costs given in the statement should not be looked on as ideal. It is in fact an expedient. In collecting the data the classification of the companies was followed of necessity; later, in compiling the figures, they were thrown into the best groups that could be made.

The aim was to make the statement self-explanatory, but brief additional explanation seems to be required. This will be clearer for a brief statement of the transportation relations of the camps.

The average haul by railroad to water is 23 miles, while 4 is the minimum. A few of the concerns have their own railroads reaching to point of delivery in the Sound, but most logs are hauled for a longer or shorter distance on common carrier railroads. Items 4, 11 and 14, with others in less degree, are materially affected by this fact, are of doubtful value when taken separately, and comparison of any one camp's cost with the average would have little point.

The term salaries refers to the pay of Superintendents and that of bookkeepers, etc., at main offices detached from the woods. Following the practice of many camps, the pay of foremen, camp bookkeepers and scalers, time keepers, and other general help is thrown pro rata into the cost of the major operations, falling and bucking spur construction, etc., and it is also included in total labor cost.

Item No. 2 includes the labor cost of yarding, roading, loading, moving engines, running out lines, building landings, pumping water, etc.

Number 3 includes the cost of building spur railroads, and the small amount of pole roads employed in this region. In some cases all the railroads used are taken care of under this heading, or as an operating expense. This has the effect of increasing this item above the normal charge and decreasing Classification No. 11. Item 3 was a hard cost to take care of for the additional reason that in some cases the costs from year to year varied greatly due to varying conditions in the "shows," to the time the work was done, and the method of accounting. Where this condition was found it was necessary to use a figure representing the average cost for several years rather than the cost for one year.

Number 5 includes the cost of sorting and rafting the logs, and some of the figures on which the cost was based include the cost of unloading. Over one-half of the amount given in the classification was paid to boom companies who do the work at a fixed rate per M. feet, the balance representing the amount paid to labor by the logging or lumbering companies.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Basswood Wanted

No. 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Lath Wanted

Wanted, all grades of lath. Please quote lowest prices. Lumber wanted also. Box 244, Canada Lumberman, Toronto. 17-17

Shingles, Posts, etc.

Wanted, stocks of lumber, shingles, ties, posts and timber. W. H. Thornton, 646 Dundas St., London, Canada. 17-17

Wanted

To buy, some No. 1 Cedar Ties. Apply Box 242, Canada Lumberman, 347 Adelaide Street West, Toronto. 17-20

Wanted Hickory Squares

5 ft. 6 in. by 1¼ in. by 1¼ in.
F.o.b. London Port. For price and particulars apply Box 237, Canada Lumberman, Toronto. 16-17

Pulpwood Wanted

10,000 cords four-foot peeled pulpwood, also dry mechanical wood pulp and sulphite wood pulp. Quote prices C.I.F. Liverpool, England, and Bordeaux, France. Write Box 233, Canada Lumberman, Toronto. 16-17

TENDERS

Tenders will be received up to October 1st for supply of packages for the Clarkson Fruit Growers Association for 1916, in quantities approximated below:

Berry Boxes—1,000,000.
Crates, 27-Qt.—40,000.
Field Carriers—600.
Baskets, 11-Qt.—75,000.
Covers, 11-Qt.—50,000.
Baskets, 6-Qt.—20,000.
Covers, 6-Qt.—15,000.

Tenders may be rendered for the whole requirements or for separate parcels, and either f. o. b. cars Clarkson, or delivered to the barns. Prices required for crates made up and in the flat, and for baskets with and without handles. Payment, 80 per cent. cash on delivery, balance on completion of contract. The lowest or nny tender not necessarily accepted.

Specifications must be secured from the Association before September 10th.

W. SHOOK, Sec'y.,
17-17 Clarkson.

For Sale–Lumber

For Sale

Ontario White Cedar Shingles for sale. Address Seymour Hawke, Millar Lake P. O., Ont. 14-17

For Sale

A few cars strictly 4 x 16 in. White Cedar Shingles.

J. AUSTIN & SONS,
14-17 Kinmount, Ont.

For Sale

Valuable bush, Hardwood; 16 miles from Toronto. Box 222, Canada Lumberman, To ronto. 14-17

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

About 1,000,000 feet if Hemlock, cut August 1914, well manufactured and carefully taken care of. Write for sizes and price to The Wm. Cane & Sons Co. Limited, Newmarket, Canada. 17-20

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

FOR SALE
Norway and Jack Pine—Mill Run

1 x 4/5 x 10/16 ft.	850,000 ft.
1 x 6	410,000 ft.
1 x 8	67,000 ft.
1 x 10	14,000 ft.
2 x 4	158,000 ft.
2 x 6	161,480 ft.
2 x 8	306,222 ft.
2 x 10	144,537 ft.
2 x 12	26,849 ft.
Norway Pine Culls	
1 x 4 and up x 10/16 ft.	1,200,000 ft.

DEVON LUMBER CO.,
5t.f. Ottawa, Ont.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

Highest grade accountant, 20 years' experience in public works and lumber, now chief accountant in Ontario, wants change, Ontario or elsewhere. 40 years old, married. Highest references and securities. Box 210, Canada Lumberman, Toronto. 12-17

Position wanted by an experienced man, capable of taking full charge of manufacturing, selling, shipping and marketing of lumber. Thirty years' experience. Best of references. Box 229, Canada Lumberman, Toronto. 16-17

Portable House Expert. Practical man, experienced in designing and manufacturing portable houses is open to take charge, or organize. This is the best wood-working line to-day, and there are big orders in view, besides regular profitable business. Address, American, Box 243, Canada Lumberman, Toronto. 17-18

Wanted–Employees

Advertisements under this heading two cents a word per insertion. Minimum charge 50 cents.

Lumber Salesman Wanted

We want a man calling on the furniture trade to handle our hardwood lumber and veneers in Canada, particularly Ontario, on commission basis. If you are interested give full particulars of your connection. Box 230, Canada Lumberman, 347 Adelaide Street W., Toronto. 16-17

For Sale–Machinery

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.

1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3⅜-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Miscellaneous

Wanted

Mill by contract. Hard or soft wood. Bank and efficiency references. Box 235, Canada Lumberman, Toronto. 16-19

Wanted

A second-hand Alligator, propeller driven, must be in good condition. Give full description with price and state where same could be delivered in case of purchase. Box 225, Canada Lumberman, Toronto. 15-18

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including.—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Tenders for Pulpwood Limit

Tenders will be received by the undersigned up to and including Wednesday, the fifteenth day of September, 1915, for the right to cut pulpwood on a certain area situated north of the Transcontinental Railway, west of Lac Seul and south of English River in the District of Kenora.

Tenderers shall state the amount they are prepared to pay as bonus in addition to the Crown dues of 40c. per cord for spruce, and 20c. per cord for other pulpwoods, or such other rates as may from time to time be fixed by the Lieutenant-Governor in Council, for the right to operate a pulp mill and a paper mill on or near the area referred to.

Such tenderers shall be required to erect a mill or mills on or near the territory, and to manufacture the wood into paper in the Province of Ontario—the paper mill to be erected within such time and in such place as the Lieutenant-Governor in Council shall direct.

Parties making tender will be required to deposit with their tender a marked cheque payable to the Honourable the Treasurer of the Province of Ontario, for ten per cent. of the amount of their tender, to be forfeited in the event of their not entering into an agreement to carry out the conditions, etc.

The highest or any tender not necessarily accepted.

For particulars as to description of territory, capital to be invested, etc., apply to the undersigned.

(N.B.—No unauthorized publication of this notice will be paid for.

G. H. FERGUSON,
Minister of Lands, Forests and Mines.
Toronto, June 5th, 1915. 12-17

Spanish Market for Cooperage

Large quantities of cooperage are manufactured annually at Almeria in Spain for the shipment of grapes. Grape barrels are chiefly made of oak and pine—probably more pine is now used than oak. Apart from a few shipments of oak staves from Liverpool brought there from the United States the remainder is imported direct from New Orleans.

The dimensions of the pine staves are as follows, viz.: Length, 0.49 to 0.50 centimetres; width, 5.50 to 6 centimetres; thickness, 6 to 7 millimetres. The number of pieces to a barrel are 28 to 30. Ends, 0.42 x 0.42 centimetres—three pieces, although a proportion of four pieces is admitted—thickness, 10 to 11 millimetres. The prices of this timber range from 0.6 to 0.85 cents of a pesta ex store for the quantity necessary for each barrel. The hoops for these barrels come chiefly from the north of Spain, and from the Barcelona district. Occasional cargoes are imported from Italy.

International Trade in Matches

A survey of the world's supply and demand for matches has just been issued from Swedish sources. The period from 1907 to 1912 is stated to have been a very unfavorable one, except, perhaps to the Scandinavian makers. This unfavorable position was brought about by two causes, viz.: the lower markets and the greatly increased production of matches in different countries. It is asserted that during the period under review, most of the Finnish, Russian, German, Belgium and United States factories have worked on a very small margin of profit and in some cases even at a loss. More especially does this apply to the Belgian match industry, which, it is declared, has had to compete with ruinous prices.

The present position of the match industry as applied to the international supply and demand may be summarized as follows:— Sweden holds her former lead and has almost monopolized several of the most important export markets such as British and Dutch India. Norway holds second place for the output of matches and the third place can probably be claimed by Austria-Hungary, which country, before the war, had a fairly important export trade to the Balkan States and also to markets in Asia and elsewhere.

Germany, on the other hand, has made very little headway as a match exporting country, it has not been found possible to keep up the quality at the same level as that of Swedish and Norwegian matches. Furthermore, German manufacturers have found it impossible to compete with the abnormally low prices of really cheap matches such as are produced by the Japanese.

In regard to France, a match monopoly exists in that country but as the largest factories are in the area at present occupied by the Germans, France is compelled for the time being to import matches. The same situation also applies to Belgium. In both Russia and the United States an extensive match industry is carried on and is protected in both cases by high tariffs but manufacturers find it difficult to compete to any appreciable extent on the international market.

The export of matches of United Kingdom manufacture is mostly confined to certain countries such as Australia where advantage is derived from a preferential tariff.

Russia and the United States have hitherto presented no opportunity for Scandinavian matches owing to the extent of the home industries, but since the last tariff reduction came into effect in the United States, the export of matches to that country is increasing.

In the Levant, Austria has hitherto predominated, but owing to the war new possibilities have been opened up there. Excellent markets for matches are offered by British and Dutch India and the possibilities for further increasing the trade are distinctly good.

South America is regarded as a somewhat inferior market in view of the large production of a domestically made match of low grade, which is protected by high tariffs.

The Japanese match manufacturers mainly control the Chinese market and on several important Asiatic markets keen Japanese competition has to be met.

The inception of the Japanese match industry dates back to about 1870 and the industry made particularly rapid strides during the two last decades of the nineteenth century. At one time Japanese-made matches seriously threatened the trade in the higher quality of European matches on the Indian market, but this competition has been successfully withstood.

In British India, the Japanese competition has almost, and in Dutch India, entirely vanished, and also in other European colonies in Asia, Japanese matches have lost much ground. On the other hand matches from Japan almost entirely monopolize the Chinese market. Japan has also succeeded in securing a share, though not a very large one, of the Californian trade since the reduction of the tariff in the same way as Scandinavian matches have begun to make some inroad in the Eastern States.

The war has tended to open out new opportunities for an extended market for the Scandinavian match industry in Germany and perhaps even more so in France and in the United States. The entire cessation of the Belgian export trade has naturally not been without its influence on the supply and demand in different parts of the world.

Box Manufacturers Campaigning for Better Nailing

The National Association of Box Manufacturers in their campaign for increasing the use of boxes and meeting the competition of fibre boxes and other cheap and unsatisfactory varieties of containers recently sent out a pamphlet upon the subject which reads in part as follows:—

"Why has there been an increase of over 300 per cent. during the past ten years in the loss and damage claims account of the railroads?

"Why are your shipments not being delivered to customers in good condition?

"Are you nailing up your wooden shipping containers properly?

"Are you economizing by not using enough nails?

"If you are, it is false economy.

"Why not protect your customers, the railroads and yourself? It can be done."

"The wooden box manufacturers have heard many complaints from the railroads relative to packages failing in transit, with the result of increased damage claims.

"We are passing through an era of economy in shipping containers, until the old motto of 'not how cheap, but how good' has been reversed to 'not how good, but how cheap.'

"We have investigated the various causes for the failure of wooden boxes in transit, and are convinced that the principle reason is faulty nailing. Shooks are frequently nailed up by inexperienced help, and in many instances by piece work, with the result that the carrying capacity of the box is reduced 30 to 50 per cent. by using nails that are too small and too few in number, consequently a generally poor job of nailing.

"It is imperative that the shook manufacturers, shook consumers and the railroads require that wooden boxes do the work for which they are designed, viz., carry safely to destination without breakage. We, therefore, ask the co-operation of all interested, in the better nailing of wooden boxes, and herewith submit a schedule of general rules, giving the size and number of nails to be used for the different thicknesses of lumber.

"The number of nails to be used for a given box is determined by adhering to the rule of spacing nails approximately two inches apart, except when nailing up boxes where sides, tops and bottoms consist of more than one piece. In such case make sure the narrow pieces have at least two nails in each nailing edge, and more if necessary to comply with the rule for two-inch spacing referred to.

"Schedule for the nailing of soft wood boxes: ¼-inch thick, use 4d cement coated nails; ⅜-inch thick, use 5d cement coated nails; 7/16-inch or ½-inch thick, use 6d cement coated nails; 9/16-inch or ⅝-inch thick, use 7d cement coated nails; ⅞-inch thick, use 8d cement coated nails.

"Schedule for the nailing of hard wood boxes: ¼-inch thick, use special large 3d or regular 4d cement coated nails; ⅜-inch thick, ust 4d cement coated nails; 7/16-inch or ½-inch thick, use 5d cement coated nails; 9/16-inch or ⅝-inch thick, use 6d cement coated nails; ⅞-inch thick, use 7d cement coated nails.

Two illustrations are given in the pamphlet, one showing the wrong way and stating as the items of inefficiency: Not enough nails; nails driven in straight line, all in end grain; nails driven in cracks, and no side nails. The right way shows: One-third more nails; nails properly staggered and tipped; nails all driven into stock, and side nailed. Commenting on these illustrations, the association says:

"If the above suggestions are strictly adhered to, it will add greatly to the carrying strength of wooden boxes. We are sending this pamphlet to shook consumers and ask their co-operation for the better nailing of packages. Won't you please co-operate with us to the extent of instructing your nailers to make sure that your boxes are nailed the right way. If you are interested and will co-operate with us, upon application we will send you these nailing specifications printed on a card 12 x 12, to be hung in your shipping room."

The National Canners' Association reports that by direction of the executive committee, application has been made to the official classification committet of the Eastern railroad territory for permission to ship open boxes of canned foods, with the lids tied in bundles instead of nailed on.

3/8" side and end matched Birch and Oak Flooring laid over old floors will give you even better satisfaction than thicker hardwood put down on the joist.

We make a specialty of 3/8" Hardwood Flooring and ship mail orders promptly. Put some of this in your own residence and when your friends see it, other orders will follow.

John Harrison & Sons, Co., Ltd.
Saw and Planing Mills
Owen Sound, Ont.

J H & S Co

Review of Current Trade Conditions

Ontario

While we are not able to report anything in the form of trade improvement during the past fortnight, and while the actual volume of trade in lumber is smaller than it was two weeks ago, the general opinion of those who are watching conditions closely is that some measure of improvement is in sight. As has been the case throughout the present year, the trade of the small towns continues to be the chief factor in connection with the movement of lumber stocks. During the past two weeks there has been a falling off in this source of demand, because the farmers have been exceptionally busy with their harvest. Nevertheless, the farmers' trade today is as good as it was a year ago and gives every promise of improvement as soon as the harvest work is over. For a short time the harvest situation in Ontario caused much uneasiness as the frequent rains were the cause of a great deal of difficulty in connection with cutting and taking in the crops. The peculiar August weather resulted in some of the wheat in Ontario growing after it had been cut and deteriorating in quality, yet farmers are getting so good a price for their products of all kinds this year that the grown wheat will be worth a dollar a bushel to them as feed. The oat crop is excellent and has not been injured by the rain. The same applies to a great extent to the crop of corn. There will also be a good second crop of clover and alsike this year, so that, taking things all in all, the farmer in Ontario is doing well and is expected to have a better supply of money this fall and winter than usual, a fact which cannot help to improve conditions in the lumber trade.

It is not possible to say anything particular about special lines of lumber in Ontario. Everything is quiet and only such stock as is actually required for the small consumption in progress is moving, the result being that prices are low and nothing stands out as of special interest. Hemlock, which is so generally recognized as a barometer in connection with the Ontario trade, is at the very bottom of the trade ladder at present, but cannot remain there long, as stocks are being gradually depleted and any demand whatever will start values upward again.

Most of the Ottawa mills are making arrangements for their winter's operations. A large number of men have already been sent to the camps, but the total number of men employed will be far less than last year. Wages in the woods are much lower than they were a year ago, ranging from $12 to $22, whereas a year ago they were from $20 to $30. Plenty of men are offering even at these rates. There is very little actual movement in lumber at Ottawa. A few shipments are going forward to the United States, but they are small in comparison with those of normal times. The local trade is quiet.

Eastern Canada

The local market at Montreal continues quiet, both in the wholesale and retail sections, but prices are steady. Considerable activity is shown in the box-making industry which has extensive orders for ammunition boxes. Smaller centres throughout the province are also enjoying a fair demand for lumber, as a moderate amount of building is still in progress. Farmers have been doing extremely well and are in a good position to spend money upon buildings and improvements. The movement of wood goods for export to the United Kingdom continues on an extensive scale, as exporters are doing their best to get their stocks shipped during the present scarcity of grain shipments, which will soon come to an end when the new grain comes forward. The present outlook is that most of the lumber for export will have been shipped within a short time.

The export trade in Quebec province continues on a quiet but comparatively satisfactory basis. One large manufacturer reports that his company has sold its total output of 1915 for export, partly to the United Kingdom and partly to the United States. The English market at present continues fairly active for spruce, but pine is slow. Quebec manufacturers continue to experience great difficulty in securing vessels for export to Great Britain. Freight rates are now about 140s., whereas a year ago they were from 34s. to 40s. per Petrogad standard. The United States market for spruce is now very active, but there is a fair movement in pine. The Montreal market is very quiet and as it takes ordinarily a large amount of low grade stock from Quebec mills these mills are feeling the effect considerably.

The local market for lumber at St. John continues to show a sagging tendency and a decline in the consumption is reported. The yards and factories are very quiet. Much price-cutting is reported in connection with the few orders that are being put through. The volume of business outside of the city is greater than in the city itself, as the farmers are apparently better off than the people of the city. Shipments to the United Kingdom have shown a decrease and prices for export are also easier. The mills, however, are all sold ahead and are not much concerned in the price situation. No contracts for deals for 1916 are yet reported. A little improvement is noticeable in connection with the United States market. Laths and shingles are unchanged.

The market for eastern spruce at Boston is somewhat more active. There is a better demand for frames and a fair enquiry for dimension yard stock. It is very difficult to name a base price. Some firms are quoting $23, others $22.50, while there are some who claim that present market conditions would justify $23.50 or even $24. There is a moderate demand for random stock. The full range of price is about as follows:—2 x 3, $19.50 to $20; 2 x 4, $20.50 to $21; 2 x 6, 2 x 7, $19.50 to $20; 2 x 8, $21.50 to $22.50; 2 x 10, $23 to $23.50; 2 x 12, 23.50 to $24.

Spruce covering boards, 5 in. and up wide, 8 ft. and up long, have been sold recently as low as $19 and $19.50. Matched spruce boards, 10, 12, 14 and 16 feet, are selling at $21.50 to $22.50. An increased volume is reported in the shingle business at Boston. White cedar extras are offered at $3.20 for fair makes to $3.40 for very good ones. Clears are bringing $2.70 to $2.80 and second clears $2.25 to $2.40. Red cedar shingles are selling at $3.25 to $3.50 for extras. Lath also are a little more active, but offerings are heavy. For 1⅝ in. $4 to $4.10 is the range, and for 1⅛ in. $3.55 to $3.60.

United States

For some months past reports have indicated local and sometimes fairly extensive improvement in connection with particular branches of the lumber trade. It has been impossible, however, to claim that general improvement was under way. It is now claimed by many who are in close touch with conditions that a general improvement has commenced, in practically all sections, and applying to the whole line of forest products. Trade is certainly gaining in volume and in strength, and prices in most cases are slowly but steadily moving upward. The crops are now so well assured that dealers are expecting a good demand from the farmers and are getting ready for it. In spite of such improvement as we have reported, the actual volume of trade is light and sluggish and such benefits as we are led to expect from improvement are still considerably in the future. Throughout the yellow pine producing territory the improvement is particularly noticeable. During July the shipments from Gulf State mills exceeded the cut by over 9 per cent. and stocks were appreciably reduced.

Not much change is reported in connection with the trade in the West generally and on the Pacific Coast. There is a good movement of yard stock by rail and prices are well maintained. In the western section, however, the dull export market and coastwise trade are turning lumber which should be shipped by water, into local channels for consumption.

The movement of lumber on the Great Lakes continues in good volume and market centres report good shipments out by rail, so that stocks are not piling up in wholesale yards in excess of winter requirements. The meaning of this is a fair volume of retail and factory business. Hardwoods are showing general improvement along with other lines. The trade in northern pine at Buffalo is rather dull and unsettled, but the outlook is fairly promising. The lower grades are doing well and are fairly firm in price. At North Tonawanda wholesalers report a tendency towards improvement in northern pine. Prices are holding well and there are no concessions in prospect.

Great Britain

The spot market at London has been quiet during the past fortnight, chiefly on account of the holiday season. There has been a fair amount of activity however, at the docks, on account of the arrival of a good number of steamers. There is a marked shortage of yellow, white and spruce deals and planks. The general demand shows little change. It is not active, because everyone is limiting his consumption as much as possible, but it is persistent. Deliveries at London docks for the week ending July 31st amounted to 10,406 standards as compared with 8,047 standards during the corresponding week of 1914. At Liverpool, the arrivals of timber cargoes, especially spruce during July were heavy, but the consumption has also been on a good scale, and stocks were reduced to a lower level than in 1914 in a number of instances. In connection with New Brunswick and Nova Scotia spruce, however, heavy arrivals are reported

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

while the consumption is down, and the stock stands at about 4,000 standards lower than it was a year ago. The stock of B. C. and Oregon pine showed a considerable reduction as compared with July of 1914 on account of the heavy demand for these woods. Imports of birch logs and planks are much greater than they were a year ago, the consumption has increased to an even greater extent, and stocks are lower. The latest advices to hand state that the general feeling is that spruce deal c. i. f. values have reached their lowest and that the small quantity now offered cannot be bought at the prices accepted a few weeks ago. This is not to be wondered at, because recent cargoes must have left shippers with a heavy f. o. b. loss. France havve been buying spruce rather freely, and enquiries are still numerous from that quarter. France does not usually consume spruce extensively, and this new demand is relieving the situation considerably. With the absence of Swedish goods also there is little doubt that shippers can be expected to revise their prices and place them upon more profitable basis.

No important advance is reported in the Liverpool spot market; neither has there been any decline. The combined stocks at Liverpool and Manchester as reported on July 21, were 25,660 standards, against 21,730 standards last year. Actual stocks held by inland merchants and importers at this time last year were much heavier than they are now. It is not expected that the consumption will show any reduction, therefore prices in the future are not likely to be any lower. Birch c. i. f. values are firm and it is expected that they will continue so with an upward tendency. Spot values have advanced considerably. There is a good demand and it is expected that it will continue.

The import of Canadian pine deals at Liverpool has been the smallest for some years, owing to the preference given to other better paying freights. At Manchester there is a steady demand for pine goods for special work, especially in sidings, and good prices are being obtained. Redwood from Canada has been offered somewhat freely. The import figures for July, all things considered, are fairly satisfactory. No change is reported in market conditions at Glasgow. The demand continues poor. Prices are ruling very firm and are expected to continue so. Arrivals of spruce have shown an increase.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Trade Continues Quiet

St. John, N.B., August 23rd (Special to the Canada Lumberman): A further decline in the quantity of lumber being used locally has taken place in the last two weeks, and the yards and factories are having a hard time to keep a limited crew of help busy. Prices have very little bearing on the conditions, as builders are very few who feel at all disposed to do any extensive building. Only such repair work as is absolutely necessary is being done, and and if pine is brought in and any competition comes along cutting of price takes place. When work is finished neither the merchant who supplies the material or the workman who does the work are much better off. This is the scale upon which local building is being done at and around St. John and we understand it is more or less the same all over the country. More work is being done out in the country round and about St. John than is being done in the city, as the farmers seem to have more money than the average city man, and are not so hard hit by the war.

Shipments to United Kingdom during the past two weeks have been smaller than at any time during the year. During June and July the shippers were very busy and quite heavy shipments went forward, but at present very little stock is being loaded and mills are accumulating. Prices have also receded to some extent, but as the mills are all sold ahead it makes little difference to them how prices are. It is said that prices have fallen £2 10s. from the high level. Freights remain as firm as ever and about as scarce. Some liner space for this winter's shipments was taken at 150 shillings per standard, which was 10 shillings below the asking price. It is said that as high as 175 shillings has been asked on space for winter, but no bidders will pay any such price.

No contracts for deals have been placed for 1916, Logs will be as high in 1916 as in 1915, when they cost a little more than previously. If the millman cannot get a fair price for his deals he must stop cutting logs, as this year supplies, money and everything will be at a premium, and unless he knows what he can do he must desist from cutting.

The United States market shows some improvement, not in price, but in orders. It is to be hoped that prices may get firmer. Practically no shipments except laths are being forwarded from here.

Laths remain about the same price as two weeks ago. Stocks are fairly heavy, but in the hands of persons well able to take care of them.

Shingles remain in the same condition as all through the season. Extras and Clears are holding about the same price, but there are no buyers. Low grade shingles are fairly well sold up.

Montreal Trade Busy on Ammunition Boxes

Montreal, August 25th. (Special to the Canada Lumberman): No improvement can be reported in the local market. Business, both wholesale and retail, is very quiet, with prices, however, holding fairly well. The only section which is active is that of box-making, thanks to liberal orders for ammunition boxes. There is also a fair demand from provincial centres, where the effects of the commercial set-back have not been so marked, and where a moderate amount of building is in progress. The farmers are getting excellent prices for their produce, and are in a better position to spend money for constructional purposes.

Exporters are rushing shipments to the United Kingdom, taking advantage of the scarcity of grain. It is certain that when the new crop comes forward there will be little room available for lumber, as provisions and grain have prior claims over lumber. The chances are that within a very short time the far greater bulk of lumber will have been shipped, and when the season ends there will be a serious falling off in the totals as compared with the previous year. Lately, the exporters have been handicapped by low water—the lowest for many years—which prevents vessels being loaded to their fullest capacity. Bennett and Company have chartered three sailing vessels to load at the port of St. John, N. B.

Lumbering interests in the St. Francis River, P. Q., district should benefit from a dam about to be constructed at the outlet of Lake St. Francis by the Quebec Streams Commission. The scheme includes the erection of a log slide. The water will be raised 27 feet above the low water level of the lake and will give additional water to the powers on the river at Weeden, East Angus, Windsor Mills and Drummondville. As far back as 1913 a petition was presented to the Commission signed amongst others, by Mr. F. N. McCrea, M.P., president of the Brompton Pulp and Paper Company; Mr. F. J. Campbell, of the Canada Paper Company; Messrs. R. Tourville and E. Ouelette, of the Tourville Lumber Mills Company; and Mr. A. Mercure, lumber merchant of Drummondville, asking that the dam be erected, in order to protect the mutual interests of all timber limit-holders, manufacturers and owners of power rights, on or adjacent to the St. Francis river. It will also facilitate log driving, by increasing the length of time each year during which these operations can be carried on. Mr. McCrea, Mr. A. Mercure, and Mr. J. A. Bothwell, manager of the Brompton Pulp and Paper Company, gave evidence before the Commission in favour of a scheme.

Ottawa Lumbermen Commencing Winter Operations

Ottawa, August 23 (Special to the Canada Lumberman):—Preparations are being made by most of the lumbermen in the city and district for the opening of the camps in the woods, though the operations there are to be considerably less than last year. Last week over one hundred men were sent by employment agents here to Cartier, Ont., for Graves, Bigwood and Company; 125 to spruce limits near Jovite, for the Riordon Pulp and Paper Company, of Hawkesbury; seventy-five to the camps of James Maclaren and Company, Buckingham, in the Gatineau region. J. R. Booth has three camps working near Madawaska and is arranging to put in two camps at Kippewa, four at Black River, and two at Amable du Fond. If Shepard and Morse put in any camps at all the number will not exceed two.

Wages for lumberjacks this year will range from $12 to $22, compared with $20 to $30 last year, and $22 to $35 the year before. Even with the rate of pay at such a low level there are more men offering themselves for service than required.

Work in the lumber mills hereabouts is going ahead at full swing though there is comparatively little movement of lumber. There are, of course, some shipments going forward to the United States, but not many in comparison with those made in normal times. Locally, trade is rather dull. The heavy rains of the past week have removed all fear of a shortage of water this season. Two weeks ago some of the mills on the Ottawa River were beginning to be inconvenienced, the pulp and paper mills of the E. B. Eddy Company, at Hull,

J. & D. A. Harquail

Company, Limited

Manufacturers of Lumber

Extensive New Brunswick and Quebec timber limits, abundant with Virgin Spruce, Pine and Hardwoods.

Twenty years' experience in Milling and Manufacturing, together with a practical knowledge of Building and Architecture, is why our Customers tell us that the Dressing, Grading, and Manufacture of our Stock is just a little better than they expected.

Large stocks of 1 in. Spruce Lumber always on hand.

Try a car of our Air-dried Dressed Spruce.

We also make a Specialty of Kiln Dried Stock.

Our personal attention given to every detail.

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for instance, having been forced to close down for over a week, but the water is now at an unusually high mark for this time of the year.

The plant of the Hardwood Specialties Company, of Pembroke, Ont., was destroyed by fire last week as a result of being struck by lightning during a violent thunderstorm. The loss to the company was approximately $50,00, which is covered by insurance. The engine house, office, dry kiln and stables were constructed of brick and were saved. The fire destroyed a lot of very valuable machinery in the factory, used in the manufacture of hardwood products.

Recently the first German ship to be interned in Canadian waters sailed from Quebec with a cargo of lumber for England. The name of the vessel was kept a secret by the Government censors. Lumbermen hope that many of the German vessels interned in British ports will be put into the trans-Atlantic service so that it will be possible to make more frequent shipments than has been the case lately.

Mr. Charles Proper, of Ottawa, one of the best known engineers and millwrights in Canadian and American lumber circles, died last week at the age of 79. Deceased, who was born in Vermont, built, during his 50 years' residence in Ottawa, over 50 large mills, among them being J. R. Booth's, Gilmour and Hughson's, James Maclaren's at Buckingham and many others.

Mr. J. R. Booth has been asked by the civic authorities of Ottawa to give to the city a large piece of land in the southeast part of the city, in order to make needed improvements in the Driveway nearby. It is believed that Mr. Booth will readily grant the request as he has never refused others of a similar kind when he has been assured that the public generally would benefit.

One of the most active recruiting officers in the city is Lieut. D. J. O'Donohoe, of the 77th Battalion, C. E. F., formerly secretary-treasurer of McAuliffe-Davis Lumber Company. He has addressed public meetings every night for the last two weeks.

The total Canadian trade for July reached the $100,000,000 mark, according to a statement just issued by Hon. J. D. Reid, Minister of Customs, an increase of $7,000,000 over July, 1914. The feature of the statement is the large increase in the domestic and foreign exports. During July domestic exports reached a total of $45,600,000, and foreign goods exported from Canada amounted to $16,000,000, compared with $41,000,000 domestic and $8,000,000 foreign for the corresponding month last year. The value of manufactured goods exported last month was $12,500,000 against $5,800,000 in July, 1914. While the exports are booming there is a decrease in imports. During July, $36,000,000 worth of goods were brought into Canada, made up of $20,000,000 dutiable and $16,000,000 free goods. This is a falling off for the corresponding month a year ago, when the imports totalled $42,000,000, made up of $26,000,000 dutiable and $16,000,000 free goods. For the four months of the present fiscal year, ending July 31st, the total Canadian trade was $371,000,000 compared with $306,000,000 for the four months from April 1st last year.

Strong Demand for Wood Continues at London

Messrs. Churchill & Sim, London, England, in their wood circular, dated August 6th, report as follows:—

There has been a consistently strong demand for wood in London during July, and deliveries were some 6,000 standards in excess of those shown in July, 1914, bringing the total for seven months to 165,000 standards as compared with 154,000 standards last year. The feature of the month has been the very large increase in the Swedish importation, especially of battens, and, considering the exclusion of the Baltic ports, the comparatively large quantities to hand from Russia, emanating entirely from the White Sea. A very large business has been arranged for supplies to this country during the month, the question of tonnage being still the most important factor governing all transactions. The more immediate demand in London looks like being satisfied for the moment by the heavy arrivals, and the question of congestion at the docks is beginning to influence the minds of buyers, and causing them to operate with greater caution. Prices for all descriptions have been steady, but shippers have been able to maintain their quotations, and even to increase them slightly, in compensation for the ever rising rates of tonnage.

Imports from the St. Lawrence during the month were as follows:—Pine deals, 185,000 pieces, against 130,000 pieces in 1914; spruce deals, 394,000 pieces, against 82,000 pieces in 1914; birch planks, 81,000 pieces, against 34,000 pieces in 1914.

Imports from New Brunswick during the month were as follows: Pine deals, 7,000 pieces, against 3,000 pieces in 1914; spruce deals, 1,269,000 pieces, against 134,000 pieces in 1914; birch planks, 75,000 pieces, against 293,000 pieces in 1914.

Spruce has arrived freely during the month, and has mostly been taken overside for immediate consumption. Whitewood markets, as a whole, show considerable strength, the Baltic supply being much smaller than usual, owing to the absence of competing shipment from Riga, Petrograd and Finland. Some cheap sales of spruce cargoes were recorded during July, the reason being the simultaneous arrival at ports which could not deal with them quickly enough, rather than any market conditions of supply and demand. Pine deals are lightly stocked in London, but at the very high current prices asked for them, the demand shows signs of shrinkage.

Liverpool Market Report

Farnworth & Jardine, Liverpool, Eng., in their monthly wood circular under date of August 3rd report as follows:—In the business of the past month, demand outside of some special requirements, was of a quiet character. Imports in the aggregate were large, of some of the leading articles heavy, and as the deliveries were only moderate, stocks, especially of spruce deals and pitch pine, are considerably increased. Values rule very high, and with few exceptions, are well maintained. Ocean freight rates continue extreme, but slightly more tonnage offering.

Canadian woods.—Pine timber.—Imports so far this season have been exceedingly light, viz., about 180 loads; the demand, however, is very quiet, and stocks are moderate; values are firm. Waney pine.—First class: About 9,000 ft. imported to Manchester on contract; the demand is restricted, but stocks are moderate and vavlues rule high. Second class: There is a limited enquiry, stocks are light, values steady. Square pine.—The demand is dull, but stocks are small. Rtd pine.—There is no stock here at present, and little enquiry. Oak has not been imported; the demand continues quiet and the deliveries nominal, but stocks are light; values are firm. Elm.—The new season's timber has not yet arrived, and as the consumption has been satisfactory, stocks are reduced to a moderate compass; values rule high. Pine deals.—The arrivals so far have been light, but more important shipments are shortly expected; the demand, however, is quiet, and the deliveries only fair, but stocks are light and values very firm. Red pine deals are in fair request; stocks are light: demand steady.

New Brunswick and Nova Scotia spruce and pine deals.—The arrivals to the Mersey (including Manchester Canal) during the past month were heavy, and much in excess of the corresponding period last year, viz., 16,910 stds. (about 55 per cent. to Liverpool, 45 per cent. to Manchester), against 7,390 stds. in July, 1914. The demand is fairly steady, but the deliveries have been disappointing, and the stock—which, however, includes a number of cargoes awaiting discharge—is large, but under present circumstances not excessive: values remain very high. Ocean freights continue extreme, but tonnage is offering a little more freely. Pine deals.—A cargo just arrived should meet with fair request as stocks are low.

Birch.—Logs.—A moderate import, chitfly from Quebec; the demand has been good, and as the deliveries fully kept pace, stocks remain light; values are firm. Planks.—The imports came forward more freely; the deliveries have been fairly satisfactory, and stocks are light, values steady.

Liverpool and Manchester Stocks

The following report upon Liverpool and Manchester stocks for the month ending July 31st, 1915, is furnished by H. W. Lightburne & Company, Liverpool, and their St. John, N. B., representatives, John E. Moore & Company, Limited.

Liverpool

	Import			Consumption			Stock		
	1911.	1912.	1913.	1911.	1912.	1913.	1911.	1912.	1913.
N.B. & N.S. Spruce & Pine, Stds. ..	5,850	3,710	9,550	3,630	3,740	2,330	9,190	8,040	12,430
Birch Logs, Loads.	60	80	500	100	160	420	560	600	340
Birch Planks, Stds.	261	273	485	376	206	352	800	436	249

Manchester

Spruce, Stds... ..	6,460	3,680	7,390	5,440	7,190	4,510	9,420	13,690	13,230
Birch Logs, Loads	100	100	240	120	280	520	520	980	380
Birch Planks, Stds.	18	158	552	79	188	212	424	600	491

Stocks in Manchester and Liverpool Combined

Spruce

	1911.	1912.	1913.	1914.	1915.	
Manchester	13,860	11,260	9,420	13,690	13,230	
Liverpool.	7,960	9,590	9,190	8,040	12,430	
	21,820	20,850	18,610	21,730	25,660	Stds.

Birch Logs

Manchester	400	900	520	980	380	
Liverpool..	1,040	1,620	560	600	340	
	1,440	2,520	1,080	1,580	720	Loads.

Birch Planks

Manchester	151	594	424	600	491	
Liverpool.	291	824	800	436	249	
	442	1,418	1,224	1,036	740	Stds.

The "Axe" Never Falls on "Asbestol"

For 25 years "Asbestol" gloves and mittens have stood in with lumbermen in every lumber camp in the country. This diamond shaped trademark is familiar to thousands of lumbermen in the States and Canada.

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EISENDRATH'S CELEBRATED HORSE HIDE

Feel Like Silk.
Look Like Kid.
Wear Like Iron.

Dealers:—Be sure the gloves you sell carry the "Asbestol" label. It's your guarantee of ready sales and satisfying profits. Most good wholesale houses can supply you. If yours can't, tell us—we'll make it easy for you to order.

Eisendrath Glove Company
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Sturdily Built for Heavy Duty

Above all the Enterprise Camper Range is built to stand camp service. It's made of the best quality Bessemer steel by expert Canadian workmen. The castings are extra heavy.

The Enterprise Camper Range

is not cheap but low priced. It presents the best range value in Canada at the price. Our up-to-date manufacturing facilities and long experience enable us to sell a high grade range at a low price.

Write for details and circular.

Enterprise
FOUNDRY CO. SACKVILLE, N.B.

TENTS

Not How Low in Price But How Good in Quality

Style No. 1 Northwest Tent

is constructed so as to resist any amount of wind or storm. An ideal sporting tent or a perfect raftsmen's or lumberman's tent. Can be erected so as to form a long narrow tent or a short wide tent by simply spreading side guys and slackening end guys or vice-versa.

Write for prices and sizes.

Smart-Woods LIMITED
Canada's Largest Tent and Flag M'f'r's
Ottawa Toronto Montreal Winnipeg

American Manufacturers Honor Canadian

A number of leading American manufacturers, such as the Winchester Repeating Arms Company, the Yale & Towne Manufacturing Company, the Pillsbury Flour Mills, Armour & Company, and thirty-six others of equally high standing, members of an organization known as the Rice Leaders of the World Association, have conferred a high honor on one of Montreal's business men. Rather more than a year ago, they offered nearly 3,500 cash prizes for ideas and suggestions. This was open to anybody, and the ideas and suggestions could relate to production, sales, advertising or anything else. The object of the offer was to develop suggestions that would tend to improve the methods or products of these American manufacturers. Only one idea could be submitted to each manufacturer, no two ideas could be alike, and each idea had to be compressed into fifty words.

Thousands of Americans entered this contest, together with a few Canadians, Britishers and foreigners. The Second Prize of $500 cash has been won by a Canadian, Mr. R. W. Ashcroft, of Montreal, Manager of Publicity for the Canadian Consolidated Rubber Company, Limited, and associated companies.

In presenting him with the prize, Mr. Elwood E. Rice, President

Mr. R. W. Ashcroft, of Montreal.

of the Association, wrote Mr. Ashcroft as follows: "To have earned this Second Prize in this international competition where people in all walks of life from all parts of the world entered, is certainly a great evidence of your unusual ability, and in which you are indeed justified in taking exceptional pride. I extend to you my best wishes for the continued success your able efforts so richly deserve."

This is not only a feather in Mr. Ashcroft's cap, but is also a compliment to the business ability of Canadians, particularly in view of the fact that Mr. Ashcroft only heard of the contest a few weeks before it closed last May, and therefore had but very little time in which to compile and submit his ideas.

No special publicity was given to the contest in Canada, so that those resident in the United States, who had a whole year in which to evolve ideas, naturally had a better opportunity than Canadians to compete successfully.

S. P. Musson Son & Company, Bridgetown, Barbados, report under recent date as follows:—Lumberstuffs.—White pine—No arrivals have taken place. Merchantable is in full stock, but there is a good demand for second quality. Spruce—There is no enquiry and supplies are ample for present requirements. Pitch pine—No receipts. Shingles—The Schr. "A. V. Conrad" has arrived from Paspebiac, with a cargo or 744,400 Long Gaspe, which has been sold at $7.29 and $7.51 per M., as to quality. The market is fully supplied. Shooks and wood hoops—No receipts.

Barbados Market Neglected by Canadians

In a report to the Department of Trade and Commerce, the Canadian Trade Commissioner at Barbados, B. W. I., writes as follows:—It appears that there is a greater quantity of white pine and spruce, pitch pine and shingles being imported into Jamaica each year. The value of the import amounted to £103,442 last year. If to this be added some manufactures of wood, including furniture, amounting to £18,231, the total value of wood and manufactures of wood would amount to £121,673. Over four-fifths of this total—to be exact, £106,308—came from the United States, and from Canada only £2,954 in white pine and spruce, and £610 in manufactures of wood. Even the shingles required, amounting to £1,283, came from the United States and are chiefly of cypress. In shooks, staves and hoops, the value of the import was £31,900, but the average of the five preceding years shows the import in the neighborhood of £36,000. Of these, Canada supplied last year £324, and in the previous year only £68. Canadian firms in the lumber trade should make some efforts to obtain a better share of this large annual import. The following table gives in detail the import of lumber for the last two years:—

Variety	1913		1914	
	Quantity	Value	Quantity	Value
Wood manufactures		14,820		8,572
Wood furniture		10,530		9,659
Hoops and shooks		42,907		31,900
Pitch pine ....Ft.	12,313,596	86,195	9,073,178	63,512
White pine .... "	2,341,355	17,560	899,518	6,746
Shingles ....No.	2,086,190	5,417	511,450	1,279
Boston chips .... "	85,500	85	5,000	5
Totals		177,514		121,673

Canada's Foreign Trade in Wood Goods

Canada's exports of forest products for the twelve months ending May, 1915, and for the corresponding periods in the three previous years were valued at follows:—1915, $42,896,032; 1914, $43,054,053; 1913, $43,800,484; 1912, $41,410,417. Canada's imports of wood and manufactures of wood during the twelve months ending May, 1915 and 1914 were valued as follows:—1915, $12,412,809; 1914, $23,659,063. The 1915 imports included $11,676,236 worth from the United States and $275,301 worth from the United Kingdom. Canada's exports of wood and manufactures of wood during the twelve months ending May, 1915 and 1914 were as follows:—

	Twelve Months Ended May			
	1914	1915		
		Total	To United Kingdom	To United States
	$	$	$	$
Wood and mfrs. of—Total	50,458,696	52,944,513	11,880,464	38,929,345
Logs	631,420	1,056,699	17,060	1,039,168
Lumber—Deals, pine	1,420,127	1,138,779	1,042,323	82,439
" spruce & other.	6,493,894	6,572,466	6,126,887	407,656
Laths, palings & p'k'ts.	1,883,672	2,025,160	27,257	1,978,947
Planks & boards	19,690,758	19,201,136	1,566,249	16,439,880
Shingles	2,031,230	3,118,633	190	3,082,973
Timber, square	538,423	533,893	521,468	5,665
Wood blocks for pulp	7,197,506	6,632,333		6,632,333
Wood pulp	6,567,510	9,314,161	1,390,461	7,547,948

Red Cedar Shingles Exploited in Booklet Form

A booklet dealing with red cedar shingles has been published by the Shingle Agency of British Columbia and is being distributed in large quantities to consumers. It is the intention to follow up the pamphlets with other advertising matter a little later on. The red cedar shingle booklet is prepared in an attractive and convincing manner. It contains illustrations of many kinds of buildings upon which red cedar shingles are exceptionally suitable for roofs and sides. A strong point brought out by the booklet is that the life of a red cedar shingle roof is exceptionally long. In fact, strong evidence is presented to prove that a roof covered with red cedar shingles will outlive a roof covered with patent roofing, by many years, and will give perfect service throughout its whole life time.

SUPPLIES!

We can quote you lowest market price on

Currants
Raisins
Figs
Evaporated Apples
Peaches
Apricots
Prunes
Canned Fruits and Vegetables
White Beans
Etc., Etc.

We want your enquiries.

H. P. ECKARDT & CO.

WHOLESALE GROCERS

Church St. & Esplanade, TORONTO

Jenckes Boilers

We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

The Jenckes Machine Co., Limited

Sherbrooke Montreal Cobalt So. Porcupine St. Catharines Toronto Vancouver Nelson

The EAGLE LUMBER CO. Limited
WHOLESALE LUMBER
SANS-DIEU-RIEN
MONTREAL • Canada
Head Office at Montreal.

10/13 ft. SPRUCE
ROUGH OR DRESSED.

Saw Mills at MONT LAURIER.
Dressing Mills at ST. JEROME.

Herman H. Hettler Lumber Co.
Midland, Ont.
Manufacturers of
WHITE PINE and RED PINE
LUMBER and LATH
EXCELLENT PLANING MILL FACILITIES
Special Attention Given to Prompt Delivery.

LATH

Campbell, MacLaurin Lumber Co.
Limited
Board of Trade Building, MONTREAL

Pine, Spruce
Hemlock
Hardwoods, Lath
GOOD STOCKS PROMPT SHIPMENTS SATISFACTION
C. A. SPENCER, LIMITED
Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

The Peninsular Pulp & Paper Company Ltd., Thorold, Ont., have been incorporated.

J. E. Gardner, 10 Morrison Street, Niagara Falls, Ont., is contemplating the purchase of a portable sawmill outfit at a cost of about $800.

The Northern Planing Mills, Sudbury, Ont., have been purchased by Mr. A. J. Young, who expects to have them in operation in the near future.

The by-law to loan the Bryan Mfg. Company, Collingwood, Ont., $20,000 to rebuild their planing mills which were recently destroyed by fire has been defeated by the ratepayers.

The Hardwood Specialties Company, Pembroke, Ont., recently lost their mill by fire. The loss, which amounted to $45,000, was covered by insurance. The owners will rebuild.

The Lyman Lumber Company, Sault Ste. Marie, Ont., recently suffered a serious loss by fire. Their plant and stock were completely destroyed. The loss on the buildings amounted to $15,000 and upon the stock in the yard the loss was $10,000. A small amount of insurance was carried.

J. R. Eaton & Sons Ltd., Orillia, Ont., who recently secured a Dominion charter advise us that they found this step advisable as their business had outgrown its former capital and they found that a Dominion charter was desirable in order to facilitate their business operations in other provinces besides Ontario.

An arrangement has been made by Hon. G. Howard Ferguson, Minister of Lands and Forests for Ontario, with the Abitibi Pulp and Paper Company at Iroquois Falls, whereby the company undertakes to purchase all the pulpwood that can be offered by settlers, before cutting on the company's lands. The company now have two paper machines in operation. They expect, early in September, to have four machines running.

Eastern Canada

The Makamik Sawmill Company, Makamik, P. Q., are erecting a sawmill at a cost of $6,000.

The St. John River Log Driving Company up to the middle of August, had rafted about 40,000,000 feet of logs.

W. K. Baldwin, Baldwin's Mills, P. Q., now has his new mill in operation. The plant is much larger than the old one which was destroyed by fire.

The Eastern Townships Lumber Company Ltd., Sherbrooke, P. Q., has secured an extra-provincial license to carry on business in the province of New Brunswick.

The Shepard & Morse Lumber Company, Boston, Mass., have nearly completed the erection of a separate shingle mill in connection with their plant at Gaspe, P. Q. The mill will have a circular saw equipment to enable the company to turn out ties and long lumber. It will be operated night and day.

Western Canada

A. N. Winters & Company, Aberdeen, Sask., have changed their name to the Aberdeen Lumber Company Ltd.

The Standard Lumber Company Ltd., Big Valley, Alta., recently commenced business with a branch at Killam.

The Adolph Lumber Company's mill, Baynes Lake, B. C., is idle this season for the first time in its history. No logs were taken out last winter.

The Retail Merchants Supply Company Ltd., have been incorporated with head office at City of Salmon Arm, B. C., and capital stock of $10,000 to carry on business as manufacturers and dealers in lumber and timber.

The Lawson Lumber Company has been incorporated with head office at Oak Lake, Man., and capital stock of $15,000. Among those interested are M. Leitch, E. R. Lund, A. C. Lawson, H. M. Lund, C. A. Lawson and P. W. Paull.

At Galbraith's mill a short distance from Murrayville, B. C., serious bush fires became so threatening recently that the employees were obliged to tear out the machinery and remove it to a place of safety. After a strenuous fight the employees were able to save the mill.

The Sardis Shingle Company Ltd., has been incorporated, with head office at Vancouver, B. C., and capital stock of $10,000, to carry on business as lumbermen and timber merchants, and to deal in sawlogs, timber, lumber, shingle bolts, shingles and wood of all kinds.

According to information received at the New Westminster Dominion Timber Office a big slash in township 2, Surrey, logged off two years ago by the Timberland Lumber Company, and now owned by private interests, was deliberately set on fire recently and before the flames could be checked the

fire had reached a limit known as timber berth R. owned by the Brunette Sawmills Company, through which the flames spread rapidly.

The B. K. Shingle Company Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $10,000. The company will take over the business formerly carried on by T. W. Kerr of Mount Lehman, B. C., and will manufacture an deal in timber and wood of all kinds.

The Shull Lumber & Shingle Company Ltd., have been incorporated with head office at Vancouver, B. C., and capital stock of $200,000 to carry on business as timber merchants, sawmill, shingle mill, and pulp mill owners, loggers, lumbermen and lumber merchants in all or any of its branches.

Sealed tenders are being received by the Minister of Lands for B. C., up to September 24th for the purchase of License X452, to cut 2,566,000 feet of fir, cedar, hemlock, and balsam on an area lying between lot 901 and S. T. L. 2492P, on the west side of Loughborough Inlet. Two years will be allowed for the removal of the timber.

The employees of the Abbotsford Timber and Trading Company, Abbotsford, B. C., had a hard fight against bush fires recently. The flames came very close to the mill building and for two days and two nights the entire crew were fighting against the fire which surrounded the property. Fortunately the wind changed and saved the situation.

The Empire Lumber Company, Cowichan Lake, B. C., report that they will not be erecting a mill at Crofton until the lumbering conditions have completely changed for the better. Although conditions are now improving they do not yet feel justified in going ahead with this work. Sooner or later, however, they intend to put up a mill at Crofton.

The dry kiln connected with the Langs & Rodds shingle mill at Rosedale, B. C., was recently destroyed by fire. The loss included 6 car loads of shingles and is estimated at $5,700 which is partially covered by insurance. The company have in course of construction another dry kiln of greater dimensions and efficiency than the one which is destroyed.

The Powell River Company Ltd., Powell River, B. C., is about to start another unit in connection with its plant which will increase the output of newsprint by 50 tons per day. The company have large contracts ahead, but have only recently been able to secure sufficient tonnage to operate the entire plant at full capacity. The output of the plant has been delivered so far to Pacific ports on both sides of the ocean, China being a large consumer of newsprint.

A despatch from Nelson, B. C., states that a number of sawmills in the Kootenay which were idle for some time have recently been put in operation. The C. P. R. mill at Bull River is running at full capacity. A large staff of men is employed at the mill and camps of the Otis Staples Lumber Company, Wycliffe, B. C. The Malcolm McInnes mill at Crow's Nest is operating on from 10,000,000 to 12,000,000 feet of logs which it has on hand. The East Kootenay Lumber Company have resumed cutting at their plant at Loco, near Cranbrook, turning out about 35,000 feet per day. In the Elko Valley, the plants of the Baker, & Ross Saskatoon Companies are cutting steadily. The Standard Lumber Company, Cranbrook, B. C., expect to have their mill in operation shortly. It is also expected that the Jewell Lumber Company at Hanbury and the Rodger Lumber Company at Creston will start their plants this season.

The Weekly Bulletin of the Department of Trade and Commerce for August 16th contains, among its trade enquiries, the following:—974—Peeled props.—A Welsh firm is prepared to contract for a cargo of 1,200 fathoms or 2,025 cords of peeled props f. o. b. their vessel in any ice free Nova Scotian or New Brunswick port, for October to December loading at a free on board price of 35 shillings a fathom, or approximately $4.98 per cord. The props should be cut according to the following specifications:—Top diameter, 2½ inch to 5 inch; length, 6½ feet, 7½ feet, 9 feet. Spruce, balsam and for jackpine, bark to be removed.

The Weekly Bulletin of the Department of Trade and Commerce for August 16th contains, among its trade enquiries, the following:—936—ready-made houses, lime, cement, lumber, iron, structural iron and steel for factories, houses, bridges, electrical and steam machinery, machine tools, agricultural machinery and implements.—An engineer in Paris with connections throughout France, invites correspondence from manufacturers or producers of above articles and manufacturers of supplies for railroads, tramways, mines and quarries, contractors, factories.

At a recent meeting of the Western Pine Manufacturers Association held at Spokane, Wash., Mr. C. S. McGoldrick, of the McGoldrick Lumber Company, Spokane, reported having attended a meeting of the Mountain Lumber Manufacturers Association at Calgary, Alta., recently. He remarked particularly upon the difference between the attitudes of the United States Government and of Canadian Governments towards the lumber industry. "The United States Government," he said, "is holding a post-mortem examination upon the industry, while British Columbia is doing constructive work for the industry."

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914 cut.

Merchantable 1 x 4 x 10/13
Merchantable 1 x 5 x 10/13
Merchantable 1 x 6 x 10/13
Merchantable 2 x 4 x 10/13
Merchantable 2 x 5 x 10/13
Merchantable 2 x 6 x 10/13
Merchantable 2 x 7 x 10/13
Merchantable 2 x 8 x 10/13

all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60 per cent. 12 13 ft.

Cull White Pine—1914 cut

1 in. and 3 in. x 4 in. up x 6/16

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13
3 in x 9 in x 10/13

3,000,000 pieces Mill Run Pine Lath, 4 x 1½ x ⅜, 1915 cut.

1,000,000 pieces Mill Run Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

1,000,000 pieces No. 2 Spruce Lath, 4 x 1½ x ⅜, 1915 cut.

Write to-day!

Blair & Rolland, Ltd.

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H. BOURGOUIN

Dominion Express Bldg., 145 St. James St., Montreal

Wholesale Lumber and Timber

White and Red Pine, Spruce Hemlock

Railway Ties, Fence Posts, Etc.

Prompt shipment. Satisfactory stock. Good service. Write for Prices.

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A Working Exhibit

Every piece of apparatus connected up and working. You can see how it works; we will gladly explain why.

Time and Cost Recording Equipment
Telephones for all purposes.
Hospital and Factory Signal Systems.
Bells, Annunciators, Fire Alarm Systems.
Watchman's Clocks and Electrical Specialties.

We have the latest ideas and developments, and every line is the best on the market.

Our Booth is in Industrial Building No. 3, West End, right opposite the Hydro Electric Exhibits.

SEE US

You May Need Just What We Have

LINTZ-PORTER CO.

27 Yonge Arcade, Toronto Main 482

Enormous Crop in Western Canada

Alexander MacDonald, president of the A. MacDonald Company of Winnipeg, during a recent visit to Nelson, B.C., stated that the estimate of this year's grain crop in the Prairie provinces is 500,000,000 bushels, which should bring to the farmers of the Prairie Provinces, he said, in the neighborhood of $350,000,000. This vast amount, he points out, will go directly into the pockets of the producers to be redistributed throughout the country. As a result of the quiet times which followed the collapse of the boom of a few years ago in the middle west, building activities have been at a standstill. The people have wanted to build but the money has not been forthcoming owing to the banks refusing to make loans until assured that the crop prospects for the year were good. With the marketing of the grain and the ensuing inrush of ready money, building activities will recommence and the demand for lumber will be enormous. The prairies will eat up every foot of lumber that the mills in British Columbia can produce. The crops are beyond the danger mark and we of the Prairies have now nothing to do but harvest the grain. This has already been begun in a number of places, and cutting will be general by the first of next week. Such a crop as there is this year will spell the release from the bonds of tight money that have been holding the country for so long. Not only will the Prairie Provinces benefit by this magnificent crop but British Columbia, as well as the eastern provinces, will get its share.

Information for Exporters to South America

The Department of Trade and Commerce have issued a "handbook for Export to South America" prepared by Mr. H. R. Poussette, Canadian Trade Commissioner at Buenos Aires, which will prove useful to lumber manufacturers who are interested in the markets of South America. The information given in the handbook is of an extensive and detailed nature, relating to financial and industrial conditions and discussing extensively all the important requirements in connection with working up trade in those countries. It is not possible to summarize the information given, but we may assure our readers that if they are at all interested in South America it will be to their decided advantage to secure a copy which may be had by writing to the Department of Trade and Commerce Ottawa. The first chapter of the handbook which is devoted to a survey of present conditions concludes with the following paragraph:—

"Canada has an exceptional opportunity to secure a footing in South American markets. There is a chance for her to gain a position that otherwise might take ten years to accomplish. However the present struggle may end, there seems no doubt that for a considerable period of years Germany, Belgium and France will find themselves prostrated, and their export trade will be disorganized and that it will be long before they can recover. Intelligent efforts should be directed towards securing oversea trade in every part of the world, so that it may be retained or brought within the British dominions."

The second and third chapters are devoted to the question of representation, which is very thoroughly discussed. There are also chapters relating to "Credits and Financing Exports," "Submitting Quotations," "Facilities for Trade" and "United States Activities." Appendix A. includes a list of British South America firms which maintain offices in London. Appendix B. gives important trade tables showing the values of imports and exports to and from the chief foreign countries, also a classification of the exports of German produce from Germany to the principal South American countries.

During the month of July the total quantity of timber scaled in all districts of British Columbia was as follows:—68,976,188 feet B.M. of saw logs; 413,458 lineal feet of piles and poles; 23,238 cords of railway ties, shingle bolts, fence posts and cordwood. The total export from all districts was:—13,413,274 feet B. M. of saw logs and 77,325 lineal feet of piles and poles. Timber sales completed during July amounted to 5,472,154 feet B. M., and 1,340 cords, the total estimated value being $9,340.79.

The Weekly Bulletin of the Department of Trade and Commerce for August 16th includes a table giving a summary of contracts and purchases made in Canada by the British Government for war supplies of various kinds up to date. The value of the orders executed or under execution for the British Government is shown to be about £46,000,000.

Mr. J. G. Campbell, of Perth, Ont., died recently in his 89th year. Mr. Campbell had followed the lumbering business for many years and was widely known throughout Eastern Ontario. He had operated successfully at various points, including Tichborne, Sharbot Lake and a number of points on the Kingston and Pembroke line, also on numerous streams and rivers in Renfrew County.

For the Camp

Pure Lard

Peerless Shortening

Mixed Pickles

Sweet Mixed Pickles

Mustard Pickles

Sauerkraut

PEERLESS SHORTENING

is particularly suitable for camp use. Your cooks would be highly pleased with its firm, smooth texture. Price about 2½c. per pound below pure lard.

TOMATO CATSUP

in bulk especially for Lumbermen's requirequirements.

Barrelled Pork

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The William Davies Co., Limited

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Grooves Cut with Huther Bros. Dado Heads

Fits Any Saw Mandrel

A Huther Bros. Dado Head consists of two outside cutters and enough inside cutters to make the required cut. This Head will cut perfect grooves, with or across grain, any width. It is an easy Head to keep in perfect condition, has a simple quick adjustment, and may be enlarged any time after purchase. Sent on approval and if not satisfactory return at our expense.

Write for New Illustrated Catalog.

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1103 University Ave.
ROCHESTER, N. Y.

Do You Want a Salesman?

¶ Every live lumber salesman in Canada reads the Canada Lumberman and Woodworker.

¶ You can get the man you want through a small advertisement in the "Wanted and For Sale" department of this paper.

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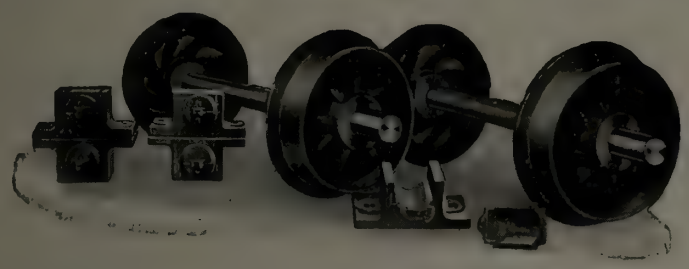
Montreal Office, 119 Board of Trade Bldg.



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Careful casting prevents flaws.

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Let us tell you the story of car wheel casting at the Smith Foundry.

Write for particulars and prices

The Smith Foundry Co., Limited

FREDERICTON, N.B.

Are your horses of use to you?

This seems an absurd question—and the answer is always **"Of course they are"**—In which case provide your stables with:

Johnson's Reliable Veterinary Remedies

Johnson's Horse Liniment, No. 1 (Alcoholic)

1 gal. jugs (Imperial)	$4.50 gal.
1 lb. bottles	8.00 doz.
2 lb. bottles	15.00 doz.

Johnson's Horse Liniment, No. 2 (an oil liniment)

1 gal. jugs (Imperial)	3.00 gal.
1 lb. bottles	6.00 doz.
2 lb. bottles	11.00 doz.

Johnson's Horse Colic Remedy
A sure and speedy cure for all kinds of Colic

1 gal. jugs (Imperial) 40 doses	5.00 gal.
1 lb. bottles 4 doses	8.00 doz.
2 lb. bottles 8 doses	15.00 doz,

Johnson's Veterinary Healing Ointment (Gall Cure)

2 lb. tins	2.00 per tin
4 oz. tins	3.50 doz.

Johnson's Condition Powders (Concentrated)

1 lb. Packages	3.60 per doz.

Johnson's Camp and Household Remedies, such as Cough Syrup, Healing Ointment, Headache Powders, Big 4 Liniment, Stomach Bitters, Cathartic Pills, etc., etc., have stood the test of twenty-five years and are in use all over Canada, from the Atlantic to the Pacific. Prices are lower than those of all other manufacturers. Letter orders receive prompt attention.

A. H. Johnson, Wholesale Druggist, **Collingwood, Ont.**

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Hamilton Company, William
Hingley & Sons, N.
Laughlin Company, Thomas
McKinnon Chain Company
Pink & Company, Thos.
Standard Chain Company
Waterous Engine Works Company
Woodhouse Chain Company

CLOTHING
Grant, Holden & Graham

CYPRESS
Louisiana Red Cypress Company
Wilson Lumber Company
Wilson Bros.
Wistar, Underhill & Nixon

DADO HEADS
Cocker Manufacturing Company

DOORS
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Boake Mfg. Co.
Haeberle Lumber Company
Harquail Company, Ltd., J. & D. A.
Rat Portage Lumber Company
Rimouski Lumber Company
Tessier, Alphonse

DOUGLAS FIR
Auger & Son
Cameron & Company
Mason, Gordon & Company
Timberland Lumber Company
Timms, Phillips & Company

DRY KILNS
Sheldons, Limited

DUST COLLECTORS
Canadian Blower & Forge Company
Sheldons Limited

ELEVATING AND CONVEYING MACHINERY
Canadian Link-Belt Company

EMERY GRINDERS
Carborundum Company

ENGINES
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Hamilton Company, William
Jenckes Machine Company
Waterous Engine Company

EXHAUST FANS
Canadian Blower & Forge Company
Sheldons Limited

EXHAUST SYSTEMS
Canadian Blower & Forge Company
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FILES
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Nicholson File Company
Simonds Canada Saw Company

GRAPHITE
Turner Brothers Canada, Limited

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Anderson Lumber Company, C. G.
Cameron & Company
Fassett Lumber Company
Gillespie, James
Hocken Lumber Company
Hoffman Bros. Company
Newman, John P.
Rat Portage Lumber Company
Rimouski Industrial Company
Spencer, C. A.
Stearns Salt & Lumber Company
Webster & Bro., James

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Canada Wood Specialty Company
Siemon Bros.
Wilson Bros.

HEMLOCK
Anderson Lumber Company, C. G.
Bartram Bros.
Cameron & Company
Canada Lumber Sales Company
Graves, Bigwood & Company
Haeberle Lumber Company
Hocken Lumber Company
McGibbon Lumber Company
Mason, Gordon & Company
Spears & Lauder
Spencer, C. A.
The Long Lumber Company

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Canadian Consolidated Rubber Co.
Can. H. W. Johns-Manville Co., Ltd.
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

HARDWOOD VENEER DOORS
Wilson Bros.

INTERIOR FINISH
Wilson Bros.

KNIVES
Cocker Manufacturing Company
Disston & Sons, Henry
Peter Hay Knife Company
Simonds Canada Saw Company

LATH
Austin & Nicholson
Bartram Bros.
Beck Mfg. Company, C.
Christy-Moir Company
Fraser Limited
Fraser-Bryson Lumber Company
Georgian Bay Lumber Company
Harris Tie & Timber Company
Graves, Bigwood & Company
McGibbon Lumber Company
New Ontario Colonization Company
Rat Portage Lumber Company
River Ouelle Pulp & Paper Co.
Spencer, C. A.
Victoria Harbor Lumber Company

LAUNCHES
Adams Launch & Engine Company

LOCOMOTIVES
Canadian Locomotive Company
Climax Manufacturing Company
Heisler Locomotive Company
Montreal Locomotive Works

LOCOMOTIVE CRANES
Canadian Link-Belt Company

LOGGING & MACHINERY EQUIPMENT
Hamilton Company, William
Russell Brothers
Ryther & Pringle Company
Waterous Engine Works Company

LUBRICANTS (Anti-Friction)
Pakes, S. A.

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Canada Wood Specialty Company
Dudley, A. N.
Eagle Lumber Company
Fassett Lumber Company
Garrett Lumber Company, T. H.
Georgian Bay Lumber Company
Goodday, H. R.
Harris Tie & Timber Company
Harrison & Sons, John
Hettler Lumber Co., Herman H.
Harquail Company, Ltd., J. & D. A.
Laidlaw Lumber Company, R.
McLennan Lumber Company
Montreal Lumber Company
Miller Company, Limited, W. H.
Murphy & Company, J. J.
Newman, John P.
New Ontario Colonization Company
Oliver Lumber Company
Parry Sound Lumber Company
Ritter Lumber Company, W. M.
River Ouelle Pulp & Lumber Co.
South Coast & Northern Lumber Co., Incorporated
Victoria Harbor Lumber Company
Wilson Bros.

LUMBER CRAYONS
Superior Manufacturing Company

LUMBER MEASURING REGISTER
Jas. Morrison Brass Mfg. Company

LUMBER TRUCKS
Norman S. Knox

MOTORS
Melchior, Armstrong & Dessau

NORTHERN PINE
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Auger & Son
Beck Manufacturing Company, C.
Blair & Rolland
Burstall & Company, J.
Cameron & Company
Cleveland-Sarnia Sawmills Company
Donogh & Company, John
Eagle Lumber Company
Fesserton Timber Company
Forest Mills of B. C., Limited
Fraser-Bryson Lumber Company
Gordon & Company, George
Gillies Bros. Limited
Graves, Bigwood Company
Harris Tie & Timber Company
Hettler Lumber Co., Herman H.
Hocken Lumber Company
Long Lumber Company
Mackarell & Company, Thos.
Mason, Gordon & Company
Quebec & St. Maurice Industrial Co.
Rat Portage Lumber Company
Rideau Lumber Company
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St. Gabriel Sumber Company
Trudeau, A.
Watson & Todd, Limited

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Turner Brothers Canada, Limited

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Sturtevant Company, B. F.

PLANING MILL MACHINERY
Canadian Blower & Forge Company

POLES
Harris Tie & Timber Company
Pink & Company, Thos.

PRESSES
Perrin & Company, W. R.

PULLEYS & SHAFTING
Dodge Mfg. Company, Limited
Hamilton Company, William
Waterous Engine Works Company

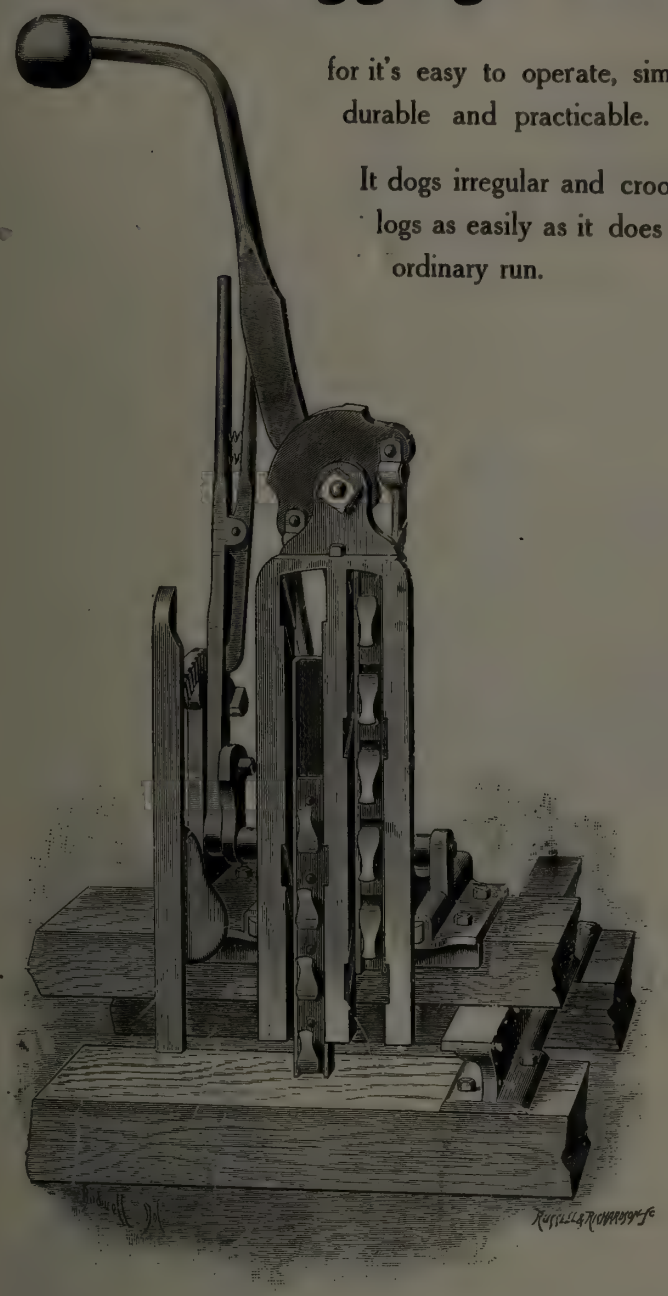
PULP MILL MACHINERY
Hamilton Company, William
Moreau Barking Machine Company

Continued on page 54)

The "Green Mountain" Dog Makes Dogging Easy

for it's easy to operate, simple, durable and practicable.

It dogs irregular and crooked logs as easily as it does the ordinary run.



The "Green Mountain" Dog is placed upon the set beam in the same manner as the uprights. By means of the Lever and Ratchet the Dog is adjustable to suit irregular or crooked logs up to 8 inches beyond face of Set Beam Uprights.

The weighted lever is fitted with a heavy ball at the end giving it considerable momentum before it strikes the shoulder of the plate. A quick throw of the lever forces the teeth into the log.

The teeth are made of cast steel forgings, easily removed for sharpening or replacing. The teeth on the slides are shaped to draw the log up to the upright instead of away. The upper teeth can be adjusted to strike the log first rolling to the upright if moving at all.

Lloyd Manufacturing Co. Limited

Kentville, N. S.

Supplies draft for burning mill waste and eliminates sparks and cinders. Size of installation can be judged from relative size of man and fan.

Sturtevant
(REG. CAN. PAT. OFF.)

Mechanical Draft

In a Lumber Mill

The above System in a Western Lumber mill handles the gases from boilers aggregating 2,000 horse power. The absence of sparks and cinders means less fire risk, decreased insurance and no discolored lumber. The additional profits due to clean lumber are worth having.

Write us for details of our systems and mention this paper.

B. F. Sturtevant Company

of Canada, Limited

Galt, Ontario, Canada

Montreal Toronto Winnipeg Vancovver

Selling Agents Sanford Riley Stoker Co., Limited.

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Hamilton Company, William
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

REDWOOD LUMBER
Mershon Lumber Co., John D.
Pacific Lumber Company

ROOFING
Bird & Son
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company
Rat Portage Lumber Company
Rimouski Industrial Company
Tessier, Alphonse

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Cocker Manufacturing Company
Disston & Sons, Henry
Hoe & Company, R.
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Shurly-Dietrich Company
Simonds Canada Saw Company
Wilson & Son, Walter

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Williams Machinery Co., Ltd., A. R.

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Long Lumber Company
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Snowball Company, J. B.
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Canadian Link-Belt Company

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Dunbar Engine & Foundry Co.
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Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SOUTHERN PINE
Arkansas Soft Pine Association
Cameron & Company
Garrett Lumber Company, T. H.
Hobart & Company
Mason, Gordon & Company
Wilson Lumber Company
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Keiths Limited

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Bartram Bros.
Blair & Rolland
Brown Corporation
Cameron & Company
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
Miller Co., Ltd., W. H.
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

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McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

SNOW PLOWS
Pink Company, Thos.

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

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Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS
Lauderburn, D. E.
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TRANSMISSION MACHINERY
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West & Peachey

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Hoffman Brothers Company
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WIRE ROPE
Thorne & Company, Limited, W. H.

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

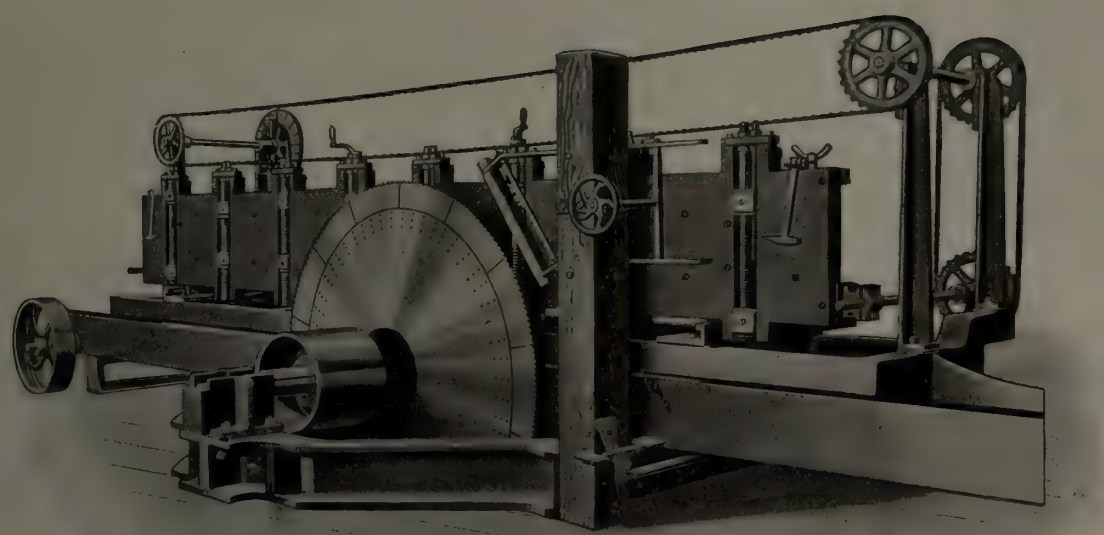
Tillson's Rolled Oats
Rainbow Flour—Top Patent Manitoba.
Goldie's Star—Famous Blended Flour.
Lily Flour—For Pies and Pastry.
Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

GUARANTEED ABSOLUTELY PURE

Canadian Cereal and Flour Mills Co., Ltd.
TORONTO - - - - - CANADA

Coe Veneer Machinery

Veneer Saw



The Coe Veneer Saw will saw any kind of veneer or thin lumber but is principally used on Oak Mahogany Cedar and Maple; under ordinary circumstances it will saw from ten veneers out of 1 inch stock up to material 3/8 inch thick. Any good sawyer can turn out more and better cut veneers with the Coe Veneer Sawing Machine than he is capable of doing with any other make and do it with perfect ease. They are made in four sizes, 12′ 14′ 16′ and 18′.

The machine is constructed entirly of iron and steel so that nothing can warp or get out of true.

This machine will saw a log down to within 3/4″ without unclamping it. 15 Horse Power is required to operate any size.

The capacity of a Coe Veneer Saw depends upon the width and length of flitches, but on flitches of average width and length a good sawyer can produce from 3,000 to 5 000 surface feet of quarter sawed oak 1/20 inch thick in ten hours.

Write us for literature.

The Coe Manufacturing Co.

PAINESVILLE, OHIO, U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer equipment in the world.

We make a Specialty of

Conveyor Chains

For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

Caldwell's Molasses Meal

The Ideal Food For Camp Horses

Because it contains the proper amount of sugar necessary for hard working horses.

Because it replaces expensive cereals and gives better results.

Because it is easily handled, requires no diluting with water and prevents waste.

Because it keeps the horses free from colic, intestinal disorders and worms.

Write us for prices. Caldwell's Molasses Meal is a profitable feed investment.

Caldwell Feed & Cereal Company, Limited

Dundas, Ont.

Logging Locomotives

Made in Canada

Our fifty years' experience in the design and manufacture of of logging locomotives is at your disposal. Many of the largest logging operators in Canada are using our "Canadian Made" locomotives.

Our logging models are as carefully designed and built as our 200 ton sizes—oil or coal burning.

MAY WE SEND YOU SPECIFICATIONS?

This engine is 13½ ins. x 18 ins. and weighs 35 tons.

Canadian Locomotive Company, Limited, Kingston, Ont.

Taylor and Arnold Ltd., Sales Agent, Montreal and Winnipeg

J. J. TURNER & SONS

PETERBOROUGH, ONT.

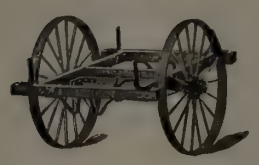
Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

DETACHABLE

Lumber Trucks



For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East **TORONTO**

INDUSTRIAL LOCOMOTIVES

The designs of our small locomotives are the result of wide experience.

All details are accurately finished to standard gauges and are absolutely interchangeable on all locomotives of the same class and size.

This cuts out long delays when parts wear out, as parts liable to wear can be kept on hand or shipped promptly from our works.

MONTREAL LOCOMOTIVE WORKS, LIMITED

DOMINION EXPRESS BUILDING, MONTREAL. CANADA

CLIMAX Improved Geared LOCOMOTIVES FOR WOOD AND IRON RAILS

A 62-ton Climax Locomotive Designed Especially for Heavy Logging Work.

Climax Locomotives are successfully operated on steep grades and sharp curves. Any weight or gauge. Locomotives in stock for immediate shipment. **Get Catalog "H."**

CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.

VANCOUVER MACHINERY DEPOT, LTD., VANCOUVER, B.C.

If You Need a Position

a classified advertisement in the **Canada Lumberman and Woodworker** will find one for you.

If You are a Capable Man

no matter how small or how big your present position may be, an advertisement in **this paper** will put you in touch with every existing possibility.
The rates are most reasonable, write us.

Canada Lumberman and Woodworker, Toronto

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:		
1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00
Hemlock No. 1:		
1 x 4 and 5-in. x 9 to 16 ft.		17 00
1 x 6-in. x 9 to 16 ft.		20 00
1 x 8-in. x 9 to 16 ft.		21 00
1 x 10 and 12 in. x 9 to 16 ft.		22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.		19 00
1-in. No. 2, 6-ft. to 16-ft.		16 00
2 x 4 to 12, 10 and 16 ft.		19 00
2 x 4 to 12-in., 12 and 14 ft.		19 00
2 x 4 to 12-in., 18 ft.		22 00
2 x 4 to 12-in., 20 ft.		24 00
2 x 4 to 12-in., 22 ft.		25 00
2 x 4 to 12-in., 24 ft.		26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.		16 00
Clear in B. C. cedar, kiln dried		50 00
Douglas Fir:		
Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.		31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.		32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.		32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.		33 00
10x20, up to 32 ft.		33 50
6x18, 8x18, up to 32 ft.		34 00
6x20, 8x20, up to 32 ft.		35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain		35 00
No. 1 and 2 cedar 1-in. Fir rough		38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough		40 00
1½-in. No. 1 4-ft. pine lath		5 00
1½-in. No. 2 4-ft. lath		4 75
1½-in. 32-in. pine		2 65
1½-in. No. 1 4-ft. hemlock lath		4 00
1½-in. mill run hemlock lath		3 75
XX B. C. cedar shingles		2 25
XXX 6 butts to 2-in.		2 90
XXXX 6 to 23-16-in.		3 10
XXXXX		3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00	
Ash, white, No. 1 common	45 00	
Ash, brown, 1sts and 2nds, 4/4	50 00	
Ash, brown, common and better	39 00	
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00	
Birch, 1sts and 2nds, 4/4	39 00	
Birch, No. 1 com. and bet., 4/4	30 00	
Birch, 1sts and 2nds, 6/4 and 8/4	42 00	
Birch, 1sts and 2nds, 10/4 and 12/4.	45 00	
Birch, 1sts and 2nds, 16/4	50 00	
Basswood, 1sts and 2nds, 4/4	40 00	
Basswood, No. 1 com. and bet., 4/4.	30 00	
Basswood, No. 2 and 3, common	18 50	
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00	
Basswood, 6/4 and 8/4, com. and bet.	38 00	
Basswood, 4/4, No. 2 com. and bet.	28 00	
Soft elm, 1sts and 2nds, 4/4	40 00	
Soft elm, No. 1 com. and bet., 4/4	28 00	
Soft elm, No. 2 and 3 common	17 50	
Soft elm, 6/4 and 8/4, 1 and 2	42 00	
Rock elm. 1sts and 2nds, 6/4 x 8/4.	55 00	
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00	
Soft maple, 1sts and 2nds, 4/4	33 00	
Soft maple, com. and bet., 4/4	25 00	
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00	
Hard maple, 1sts and 2nds, 4/4	37 00	
Hard maple, common and better, 4/.	28 00	
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00	
Red oak, plain 1sts and 2nds, 4/4.	59 00	
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00	
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00	
White oak, plain, 1sts and 2nds, 4/4.	59 00	
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00	
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00	
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00	
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00	
White oak, ¼ cut No. 1 common	55 00	
Hickory, 1sts and 2nds, 4/4	70 00	
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00	

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in.	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards: 1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run: mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce: 1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1¼-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 80 to 85 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00 45 00
1¼, 1½ and 2-in.	36 00 45 00
2½ and 3-in.	45 00
4 inch	50 00

No. 2 Barn

1 inch	28 00 36 00
1¼, 1½ and 2-in.	30 00 36 00
2½ and 3-in.	38 00

No. 3 Barn

1 inch	21 00 28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00 25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00 25 00
No. 2, 1¼, 1½, 2-in.	19 00 23 00

Mill Culls

Mill run culls, 1-in.	19 00
1, 1¼, 1½ and 2-in.	20 00
No. 2	17 00 18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E. 6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed)	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 80)

28 "Service" Branches Throughout Canada

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No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	40 - 42	26 - 28	14 - 16
5/4 to 8/4	42 - 44	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	48 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	20 00	21 00
All other random lengths, 7-in. and under, 10 ft. and up		20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1⅝-in. spruce laths		4 10
1½-in. spruce laths	3 65	3 75

New Brunswick Cedar Shingles

Extras	3 25	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites		2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 20	3 30
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¼		4 80
Washington 16-in. 5 butts to 2-in. extra red clear		3 28

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Fleming's Chronic Cough Powders
For Chronic Coughs, Colds, etc. 2.00

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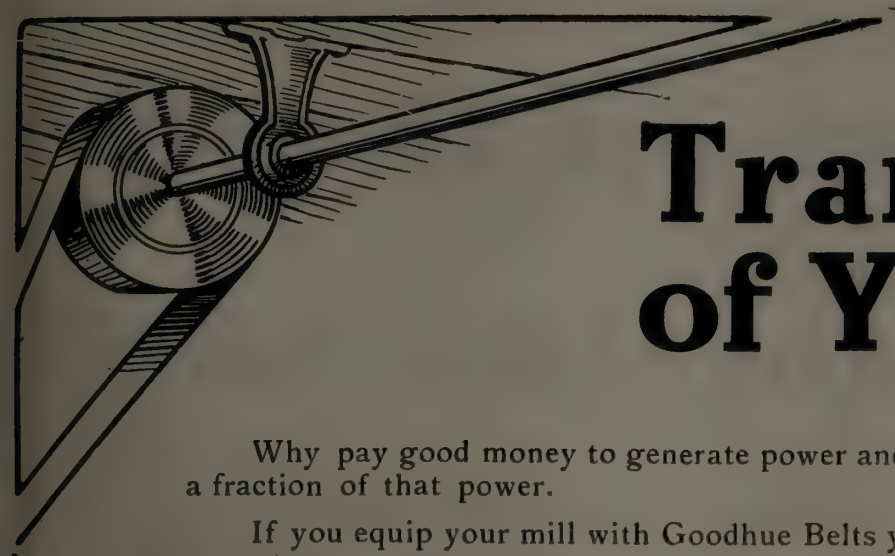
Wistar, Underhill & Nixon 16
Woodhouse Chains Company ... 56
Wuichet, Louis 12

"Wilson Bros." Hardwood Flooring

is the Flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully selected stock, and every precaution is taken throughout our entire system to make it fulfil the requirements in every particular. Write us for prices.

Wilson Bros., Limited - Collingwood, Ont.



Transmit 100% of Your Power

Why pay good money to generate power and then employ a poor belt that will only transmit a fraction of that power.

If you equip your mill with Goodhue Belts you can transmit 100% of the power generated.

Goodhue Belts stretch 15% to 25% less than other belts and have just the right amount of "cling" on the pulley.

Write us for particulars and prices.

YOU CAN DO IT WITH— **A GOODHUE BELT**

J. L. GOODHUE & COMPANY, LIMITED.
DANVILLE, QUEBEC CANADA.

OUR long experience with the particular requirements of the Lumber Industry of Canada places us in a position to give you exactly what you require for your particular work.

We have lately opened a branch at Hull, Que., where a full line of cross-cut saws, bits, holders, etc. is carried. A fully equipped repair department is in connection for the convenience of our many customers in that section of the country.

Our Vancouver Branch is similarly equipped.

You are assured ***Prompt Attention*** and ***Immediate Delivery.***

"MAPLE LEAF" SAWS

MADE IN CANADA FOR 50 YEARS

SHURLY - DIETRICH COMPANY, LIMITED

HULL, QUE. GALT, ONT. VANCOUVER, B.C.

Lumbermen's Tents and Clothing

Pure wool, Waterproof Mackinaw Coats, Pants and Shirts,
the kind you have been looking for.

Repellant Brand Army Duck Tents

The best duck that money can buy.
We can equip your van complete.

Pure wool Blankets, Sweaters, Underwear. Hand Knit Mitts and Socks. Palmers Shoe Packs, Buck and horse hide Moccasins, etc.

Grant-Holden-Graham, Limited

Factory and Warehouse

147 to 151 Albert Street, Ottawa, Can.

RUBBER GOODS
FOR LUMBERMEN

GUTTA PERCHA & RUBBER LIMITED — TRADE MARK

Belting Our long experience in the making of Rubber Belts enables us to specialize on this line. "P.M.S.," "Special Drive" and "Lion" are our leading brands for power transmission.

Packings "Redstone" High Pressure Sheet Packing has proved by test that it will outlast any other similar packing on the market. We make Spiral and Ring Packings, etc., that are equally reliable.

Hose for Steam, Water, etc., in various grades, made especially to give satisfactory and economical service under different conditions.

Fire Hose One or more of our twenty brands of Fire Hose will be found, not only in the best equipped Factories, Mills, etc., but in almost every Fire Department in the Dominion.

Gutta Percha & Rubber, Limited

TORONTO MONTREAL WINNIPEG REGINA SASKATOON CALGARY EDMONTON VANCOUVER

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa, Deputy Minister.
December 20th, 1912.

The Mark of *Quality*

Speed's the Thing

Speed in the cut, but more especially when ***out*** of the cut.
Make your carriage ***move*** when it isn't producing.

A "Long" Steam Feed is a Real Investment.

Easy of installation.

Easy of maintenance.

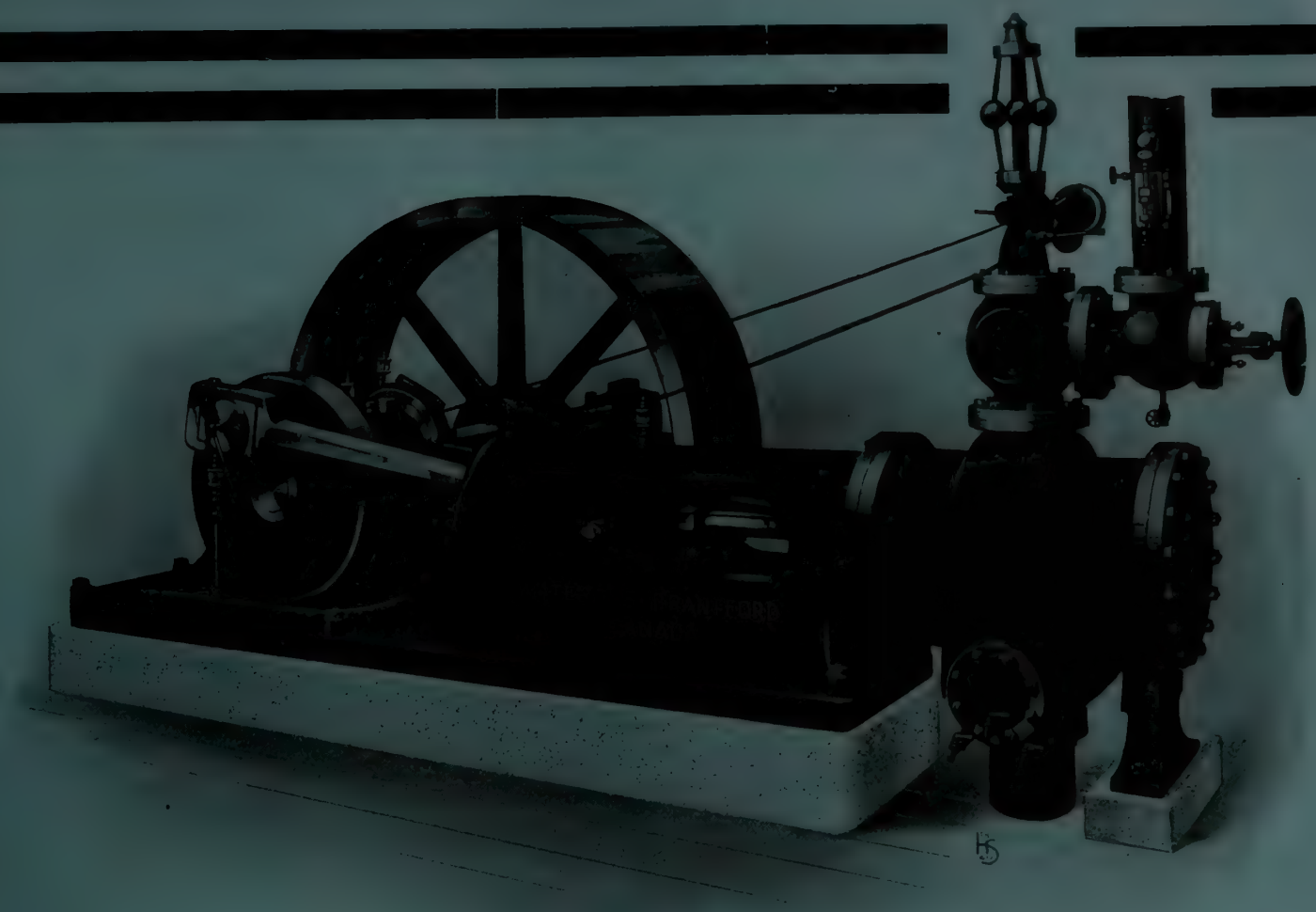
Easy of control.

Let us tell you about the merits of both the "Vertical" and "Model D" Valves.

The E. Long Manufacturing Co., Limited

Orillia, Canada

Agencies: MONTREAL—Williams & Wilson, Ltd. WINNIPEG—Stuart Machinery Co., Ltd. EDMONTON and CALGARY—Gorman, Clancey & Grindley Ltd. VANCOUVER—Robert Hamilton & Co.



Waterous SAW MILL Engines

¶ They are built for the work.

¶ Strong and simple and on the job every minute.

¶ There is nothing to get out of order.

¶ Parts are few—materials are the very best—workmanship, highest grade throughout.

¶ An occasional wipe down and a dose of oil on the wearing surfaces will keep them running right along without a hitch.

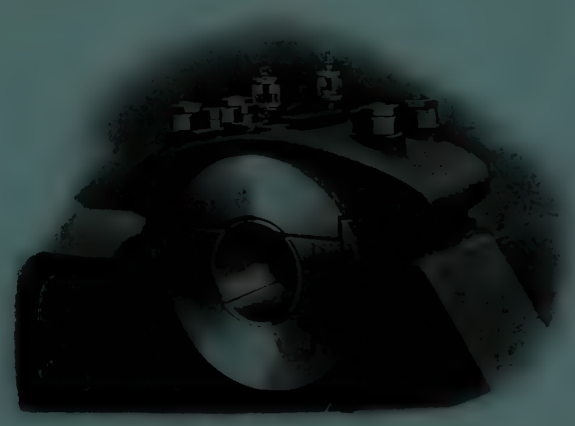
¶ If you want an engine that will give you perfect service, that you can rely on at all times, that will save coal and curses when the going is hard—write us.

¶ They're built in sizes up to 600 H.P.

As a Sample of Construction

—look at this crank bearing.

Notice the two quarter boxes one on each side with the lifting wedges adjusted through the heavy cap.
All these parts are machined, and are iron on iron bearing full length of the box.
A bearing like this makes shaft adjustment easy and a shift in alignment impossible.
It's typical of the whole engine. Get the other details—Bulletin 501.



The Waterous Engine Works Co., Limited, BRANTFORD, CANADA

"FROST KING" METAL

$5,000,000.00
worth of mixed metal sold annually.

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. **Price 30c per lb.**, Fort William and East; West of Fort William **35c per lb.**, delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, **40c per lb.**; West of Fort William, **45c**, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

The Rossendale-Reddaway Belting and Hose Company

NEWARK, N.J. U.S.A.

Manufacturers of

"CAMEL HAIR" BELTING

"CAMEL HAIR" "CAMEL" BRAND TRADE MARK REG. BELTING

Beware of Imitations

BIRD'S BULL'S-EYE BELTING

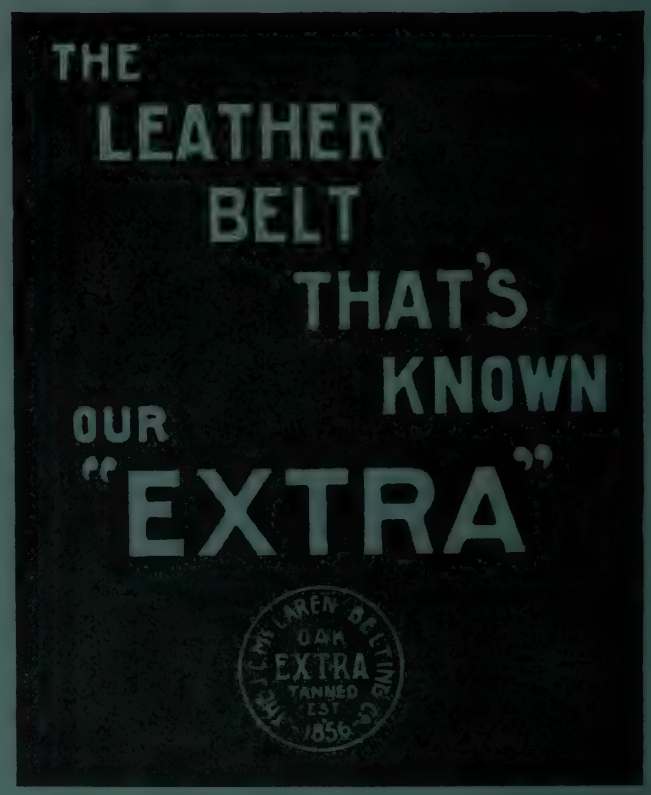
BIRD'S BULL'S EYE B BB BELTING

HAIR BELTING—"Arabian" Brand
SOLID WOVEN COTTON BELTING—"Blackbird" Brand
STITCHED CANVAS BELTING All Weights
AUTOMOBILE BRAKE LININGS

F. Reddaway & Company

653 St. Paul St. West, MONTREAL, QUE.

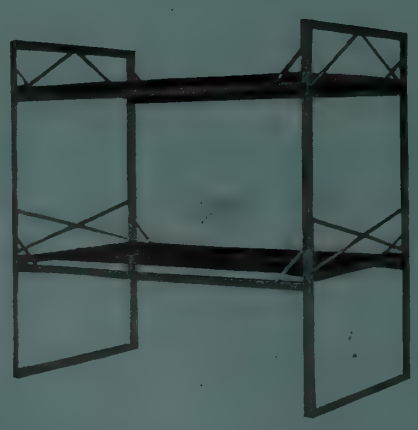
Distributors for Canada: A. R. Williams Machinery Co. Ltd., Toronto, Ont.
A. R. Williams Machinery Co. of Winnipeg, Ltd.



Montreal Toronto Winnipeg

The J. C. McLaren Belting Co. Limited

General Mill Supplies MONTREAL



Your Lumber Jack Will Do Better Work

if he sleeps on a clean, comfortable bed.

The Alaska Double Deck Bunks

are clean, comfortable, cheap and everlasting.

Write for prices.

The Alaska Feather & Down Co., Limited, Montreal

Largest manufacturers of Beds and Bedding in the British Empire.

Canada Lumberman & Wood Worker

WATER WHEELS GOVERNORS, PUMPS

Highest quality

Boving Hydraulic & Engineering Co.
LINDSAY, ONT. Limited

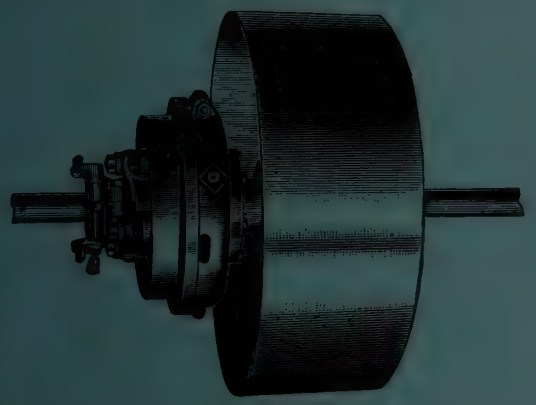
Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.



DODGE FRICTION CLUTCH PULLEYS

For Saw Mills and Planing Mills

A simple, positive, durable clutch! Every Friction Clutch Pulley we sell is guaranteed suitable and satisfactory for the work or money refunded. All sizes split or solid for quick shipment.

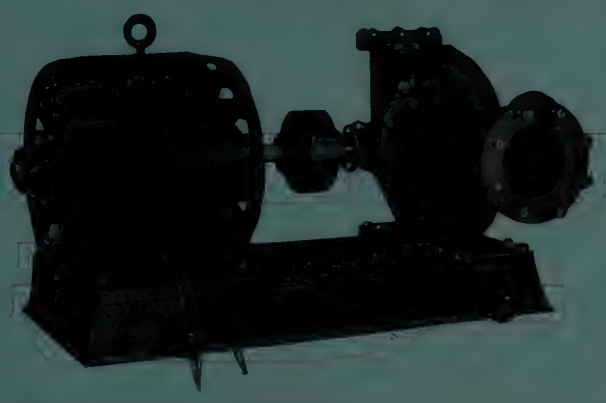
Dodge Manufacturing Company, Limited
TORONTO -:- MONTREAL

ASBESTOS

We manufacture practically every article that can be made of Asbestos—including

Asbestos { Packings, Boiler Gaskets, Pipe and Boiler Coverings

Turner Brothers Canada, Limited
MONTREAL



Pump Troubles

If you are not getting the results you want, let us know the conditions and requirements.

We Can Help You

The Smart-Turner Machine Co., Limited, - Hamilton, Canada

Keeping Tab on Lumber

The illustration was made from an actual photo of a Morrison Measuring Register in operation on a planer. It gives an accurate account of the amount of lumber passing through the machine. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

WRITE FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertisers, Page 54 Classified Directory to Advertisements, Page 62

"Made in Canada"

"AMPHIBIA"

Waterproof Leather Belting

Hugs the Pulley

Running your plant with slipping belts is like running your auto with a leaking gasoline tank—you are losing costly power.

Particularly in a saw or planing mill the conditions under which a belt has to run are severe. "AMPHIBIA" waterproof leather belting is made to stand up under these extreme conditions. "AMPHIBIA" belting hugs the pulleys, prevents slipping and transmits a maximum amount of power to your machines.

"AMPHIBIA" belting costs a little more to buy than ordinary leather belting because it costs more to make—there is more in it. Considering that belting is to handle the most costly thing in your mill—power—you should take every precaution to use the best—"AMPHIBIA"

"Leather like gold has no substitute."

Write us for prices.

Sadler & Haworth

Tanners and Manufacturers

For 39 Years Makers of the Best Leather Belts

MONTREAL	TORONTO	ST. JOHN	WINNIPEG	VANCOUVER
511 William St.	38 Wellington St. E.	149 Prince William St.	Galt Building	107-111 Water St.

To insure satisfaction—State where belt is to run

The Fire Did Not Destroy Our Small Mill or Planing Mill

WE HAVE A LARGE STOCK

OF

Red and White Pine Lumber

Dimension Timber, Deals, Etc.

In all Sizes and Grades

Dressing Done on Short Notice

SEND US YOUR INQUIRIES

Geo. Gordon & Company

CACHE BAY, ONTARIO **Limited**

Mason, Gordon & Co. 80 St. Francois Xavier Street, Montreal, Que.

Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - Western Office:—Pacific Building, VANCOUVER, B. C.

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock— heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont.

JOHN DONOGH & CO.

Wholesale Dealers
Are looking for buyers
—Special—
1 x 4 & 5 White Pine common and dressing 1913 cut
Dry Hemlock and Spruce all sizes
1205 TRADERS BANK BUILDING, TORONTO

P. & J. SHANNON

Manufacturers of

White and Norway Pine Lumber Lath, Etc.

Inquiries solicited for 1915 cut. Mill and equipment new in 1914.

Head Office and Mill:—**Biscotasing, Ont.**

MILL RUN SPRUCE

30 M. 2 x 4 — 10/16 ft.
38 M. 1 x 4 — 10/16 ft.
44 M. 1 x 6 — 10/16 ft.
20 M. 1 x 8 — 10/16 ft.
3 cars 1½ x ⅜ — 4 Spruce Lath, M. R.
3 cars 1 x 4 up No. 1 Common and Better Elm.

Spruce and White Oak Piles on hand for Immediate Shipment, 25 to 50 ft.

ARTHUR N. DUDLEY
Lumber, Lath and Shingles
109 Stair Building, Toronto Phone M. 6368

JOHN GILLIES, President — DAVID GILLIES, Vice-President — J. S. GILLIES, Sec-Treas.

Established 1873

GILLIES BROS.

Limited

Mills and Head Office
BRAESIDE, ONT.

Manufacturers of

WHITE PINE

RED PINE **SPRUCE**

New York City: Guy E. Robinson, 1123 Broadway

Ammunition Boxes

100,000 ft. 1 x 4 10/16 No. 1 Spruce
50,000 ft. 1 x 5 " "
30,000 ft. 1 x 6 " "
150,000 ft. 1 x 8¼ and up No. 1 Com. Birch

Hemlock

400,000 ft. No. 1. Hemlock Cache Bay Bone dry
2,000,000 ft. " Longford 1915 Cut

Send us your inquiries.

The Long Lumber Company

HAMILTON, ONT.

"Safety First"

Don't take a chance on losing a customer by selling him some inferior lumber, sell him

Hocken's Hemlock

and you'll be safe.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

Watson & Todd Limited

WHOLESALERS

Dry White Pine and Norway

OTTAWA

Also

Montreal and Liverpool, Eng.

The

Harris Tie & Timber Co.

Ottawa - Canada

Lumber - Lath - Shingles

Cedar Poles and Posts

Railway Ties - - Piles

Fraser Limited

Fredericton, N. B.

SELLING AGENTS FOR

Donald Fraser & Sons, Limited
Cabano, P. Q.

Fraser Lumber Co., Limited
Plaster Rock, N. B.

F & M Lumber Co., Limited
Whitworth, P. Q.

MANUFACTURERS OF

Spruce Lumber
Rough and Finished

Shingles, Lath, Piano
Sounding Board Stock, etc.

Fraser Bryson Lumber Co., Ltd.

Office, Castle Building 53 Queen St. Ottawa, Can.

Wholesale Lumber Dealers
and Selling Agents for

Fraser & Co.

Mills at

DESCHENES - - - QUEBEC

White Pine
Red Pine
Spruce
Lumber and Lath

River Ouelle Pulp & Lumber Co.

Manufacturers of

SPRUCE

Lumber Lath Pulpwood

Head Office and Mills at:

St. Pacome, Que., Canada
On I. C. Ry. 75 Miles East of
Quebec City

Also Mills at:

Crown Lake, Powerville, Riv. Manie
On Nat. Transcontinental Ry.

BARTRAM BROTHERS, LIMITED

OTTAWA, CANADA

Spruce - Red Pine - White Pine

Large stock dry 1" and 2"

Have large stock 3" Spruce Deals for export trade at water points and can make delivery.

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

The Lumberman's Milk

KLIM

(SPELL IT BACKWARDS)

In Powder Form

Klim is pure—cheaper than fresh liquid milk. One third the cost of condensed milk. No freights on useless water—keeps in any temperature—no waste.

Packed for camp use especially in 10 pound tins $2.00 each, the pound makes one gallon. Case lots, special price.

Write for samples, etc.

Canadian Milk Products Ltd., Toronto

Plants:—Belmont, Ont., Brownsville, Ont. Head Office:—Mail Building

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

FIR TIMBERS

HIGH GRADE RED CEDAR SHINGLES

LET US QUOTE YOU PRICES

TIMMS, PHILLIPS & CO., LTD.

Yorkshire Building, VANCOUVER, B. C.

The Glue Book

What it Contains:

Chapter 1—Historical Notes.
Chapter 2—Manufacture of Glue.
Chapter 3—Testing and Grading.
Chap er 4—Methods in the Glue Room.
Chapter 5—Glue Room Equipment.
Chapter 6—Selection of Glue.

Price 50 cents

Canada Lumberman & Woodworker

347 Adelaide St. West, Toronto

Heavy Fir Dimension

Is Our Particular Specialty

The Heavier it is the Better we like it

We Dress from 1 to 4 Sides up to 16-in. x 20-in., 60-ft.

Our grade is posstively right, and prices will please

Timberland Lumber Co., Limited

Head Office, Westminster Trust Bldg., NEW WESTMINSTER, B.C.

Mills at Craigs on the B.C.E.R.

Shipment by C.P.R.R., G.N.R.R. or B.C.E.R.R.

Thurston-Flavelle Lumber Company

MANUFACTURERS OF

British Columbia Red Cedar Exclusively

4, 5 and 6 inch "CLEAR A" Cedar Bevel Siding.
8, 10 and 12 inch CLEAR CEDAR FINISH.
EXTRA XXX RED CEDAR SHINGLES.

Eastern Agents, Gull River Lumber Co., Ltd., Lindsay, Ont.

Head Office and Mills, Port Moody, B.C.

Eastern Canada White Cedar Shingles

Close delivered prices will now be quoted to all points in Ontario for immediate shipment in all grades.

Either Short Count Standard or Full Count supplied as required.

This stock is bone dry and ready for quick delivery.

Special: A special price will be made this month on

CLEAR WALLS and Extra No. 1s.

to reduce stocks.

All Stock manufactured on our Standard Grading Rules which assures uniform high class Shingles.

The North Shore Shingle Association

of Eastern Canada

Write or wire for quotations.

F. G. WHEATON, Amherst, N.S.

Canadian Sales Agent

JOHN McKERGOW, President — W. K. GRAFFTEY, Managing-Director

The Montreal Lumber Co. Limited

Wholesale Lumber

Ottawa Office: 46 Elgin St. — Montreal Office: 759 Notre Dame St., W.

CHRISTY-MOIR CO.
149 Broadway, New York City

Wholesale Dealers
13 Foot **SPRUCE** 16 Foot
Lath and White Cedar Shingles

Sales Agents: Iberville Lumber Co.
Sault-au-Mouton, P.Q.

James P. Grant — John K. Campbell

Grant & Campbell

Manufacturers of
SPRUCE, HEMLOCK TIMBERS AND PILING AND LATH

Prices promptly given on all enquiries.

New Glasgow, N.S.

FOR SALE
HARDWOOD LUMBER
Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
PHONE 37 — RESIDENCE 15
JOHN P. NEWMAN Wiarton, Ont.

HAEBERLE LUMBER CO.
LUMBER AND TIMBER
White Pine, Norway, Yellow Pine, Hemlock
Oak Mouldings, Doors, Sashes and Blinds, Cedar Poles and Ties.
Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
NIAGARA FALLS, N.Y.

Hardwood Flooring
The Celebrated Diamond Brand
End Matched, Bored, Polished and Bundled
Manufactured by
SIEMON BROS., LTD.
For prices write
W. T. EAGEN
Selling Agent for Ontario and Quebec
2 Toronto Street,
Phone M. 2814 TORONTO

Lumber

Good Grades — **Right Prices** — **Prompt Shipments**

Canadian Hardwood. National Grading Rules

Birch
Basswood
Maple
Elm
Beech
All Thicknesses

Also full line in

White, Red
and
Jack Pine
All grades and sizes.

Get in touch with us for prices

C. G. Anderson Lumber Company, Limited

Manufacturers and Strictly Wholesale Dealers in Lumber

206 Manning Chambers
Toronto

WE Buy, Sell and deal in all kinds of Lumber and Timber in Canada and United States: Spruce, White Pine, White and Basswood, Ash, Cedar, Douglas Fir, Beech, Birch, Walnut, Cherry, Chestnut, Cottonwood, Hemlock, Maple, Norway Pine, Short and Long Leaf Yellow Pine, Oak, Redwood, Birch, Maple and Oak Floorings, Pulpwood Ties, and Cedar Poles.

AUGER & SON
QUEBEC

The Canada Wood Specialty Co., Limited
Manufacturers:
Lumber, Hardwood Flooring, Handles, Poles, Bed Frame Stock, Cheese Box Hoops, Heading, Baskets, Etc.
Write, Telegraph or Telephone your orders
Orillia, Ont.

R. LAIDLAW LUMBER CO.
LIMITED
Toronto
Sarnia
Buffalo

SPECIALTIES
Sawed Hemlock
Red Cedar Shingles
White Pine Lath
Bass and Poplar Siding

James Gillespie
Pine and Hardwood
Lumber
Lath and Shingles
North Tonawanda, N.Y.

It Just Depends
Advertising and Dynamite are both useful, but the results of each depend upon how it is handled.
Canada Lumberman and Woodworker
Toronto, Montreal, Winnipeg, Vancouver, London, England.

James W. Sewall

TIMBER Estimates, Topographic and Boundary Surveys, Planting, Logging Maps, Portable Mill Operations.

Technical Training Thoroughness Experience

141 Centre Street
OLD TOWN, MAINE

The Penetanguishene Planing Mill Sash and Door Factory

Planing of all kinds done by carload. Railroad Switch in connection with mill. All classes of building material, lime and cement for sale.

ALPHONSE TESSIER, Builder & Contractor
PENETANGUISHENE, ONTARIO

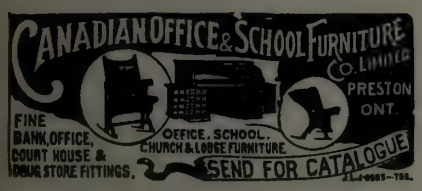
Books for Sale—Special Prices

The Preservation of Structural Timber, by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $2.

Scribner's Lumber & Log Book, 1915 Edition, Price 35c.

Baughman's Buyer & Seller, 75c.

CANADA LUMBERMAN
347 Adelaide St. West, Toronto, Ont.


CANADIAN OFFICE & SCHOOL FURNITURE CO. LIMITED
PRESTON ONT.
FINE BANK, OFFICE, COURT HOUSE & DRUG STORE FITTINGS.
OFFICE. SCHOOL. CHURCH & LODGE FURNITURE.
SEND FOR CATALOGUE

J. J. MURPHY & CO.

LUMBER and TIMBER

Spruce, Hemlock, Pine and Hardwoods

Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.

235 Board of Trade Building
MONTREAL

Do you know the worth of your Timber Lands?

My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,

Whether you want to buy, bond or sell I can be of service to you.

F. R. MEIER
Consulting Forester
1 Broadway NEW YORK

Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna. Forest Commission, etc.

"Well Bought is Half Sold"

"A Column on Lath"

200 M 1½"—4' No. 1 W. P. Lath
200 M 1½"—32" Nos. 1 & 2 W. P. Lath
200 M 1½"—36" Nos. 1 & 2 W. P. Lath
900 M 1½"—4' No. 1 Hemlock Lath
275 M 1½"—4' No. 2 Hemlock Lath
300 M 1½"—32" Nos. 1 & 2 Hemlock Lath

1915 Cut, at Byng Inlet.

2 cars 1½"—4' Merch. Spruce Lath

1914 Cut, at Gravenhurst.

5 cars 1⅜"—4' Nos. 1 & 2 Red Pine Lath

1914 cut, at Rockland.

2 cars 1½"—4' Nos. 1 & 2 White Pine Lath
3 cars 1½"—4' No. 3 White Pine Lath

1915 cut, at Waubaushene.

Write us for prices.

ALL ARE CHOICE LOTS.

Graves, Bigwood & Co.

MANUFACTURERS OF

Pine and Hemlock Lumber

1026-32 Traders Bank Bldg, Toronto, Ont.

Mills: Byng Inlet, Ont.

We are Buyers of
Hardwood Lumber
Pine and Spruce
Veneers (3 or more ply) Handles (all descriptions)
Staves Hoops Headings
JAMES WEBSTER & BRO., Ltd.
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52 St. Enoch Square
GLASGOW
Timber Brokers
Cable Address, "TECTONA," Glasgow
A1 and A B C Codes used

FARNWORTH & JARDINE

Cable Address: Farnworth, Liverpool
WOOD BROKERS and MEASURERS

2 Dale Street, Liverpool, and Seaforth Road, Seaforth, Liverpool England

PRESSES

Hydraulic and Screw
for
VENEER
VENEER DRYERS
PULP
Special machinery made to order
WILLIAM R. PERRIN
TORONTO, CANADA Limited

WASTE ELIMINATION
IN LOGGING OPERATIONS

My reports show where the waste is, and how it may be eliminated.

D. E. LAUDERBURN, Forest Engineer
1 Madison Ave., NEW YORK, N.Y.

J.M. & D.M. Croteau

Civil Engineers, Quebec Land Surveyors and Draughtsmen
81 St. Peter St., Quebec, Que.
Phone 2718

are prepared to examine and report on forest properties anywhere. Forest surveys, Logging maps, Timber estimates, Water Power, Water Storage, Topographical plans, Water supplies, Park Works, General plans for village sites and Private Estates. Railroad location and construction. Roads and Rivers improvements. Good information concerning Quebec Timber and Mining lands, cheerfully given.

Thos. Mackarell & Company

Ottawa - - - Montreal

Wholesale

Red Pine White Pine Spruce

ESTABLISHED 1855

THE McGIBBON LUMBER CO.

OF PENETANGUISHENE

Manufacturers of and Dealers in

Lumber, Lath, Shingles, Etc.

HEMLOCK BILLSTUFF a Specialty of which we have the Best Assortment on Georgian Bay.

Don't wait to write. Phone us your requirements.

All stock sized or matched if required.

Our Yards are Unequalled for Drying Lumber

To the Owner of Timber Lands

Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

L. E. Campbell Lumber Company

Cruising and Engineering Department

2234 Dime Bank Bldg. - - DETROIT, MICH.

California White Pine
California Sugar Pine
and Arizona Soft Pine

Best Stock for Factory and Pattern Lumber

Ask **LOUIS WUICHET**

Room 716 Railway Exchange, CHICAGO, ILLINOIS

T. H. Garrett Lumber Co.

Manufacturers of . . . . . **YELLOW PINE LUMBER**

Mills :—
Selma, La.
Jena, La.
Melton, La.
Waukegan, Tex.
Buena Vista, Ark.

Long Leaf Timbers,
Short Leaf Finish
and
Railroad Material

Send your inquiries and orders to :—

General Sales Office

Suite, 1220 Chemical Building, ST. LOUIS, Mo.

F. N. WALDIE, President. R. S. WALDIE, Vice-President. W. E. HARPER, Secretary.

The Victoria Harbor Lumber Co., Ltd.

Manufacturers of

Lumber, Lath and Shingles

Mills at Victoria Harbor, Ont.

HEAD OFFICE,
12-14 Wellington Street East, TORONTO, ONT.

Charlemagne & Lac Ouareau Lumber Co.
Mills: Charlemagne, Montcalm, St. Adele

The Gres Falls Company
Mills: Three Rivers and Cape Madelaine

St. Gabriel Lumber Co., Limited
Mill: St. Gabriel de Brandon
Head Office: 524 Board of Trade, Montreal, P.Q.

Manufacturers of
Spruce and Pine Lumber and Ground Wood Pulp

We handle
Everything in Lumber

Write or wire for prices and stock lists.

The McLennan Lumber Co.
Limited
21 Dorchester St. W. Montreal, Que.

ONTARIO
Canada's Banner Province

Ontario's timber production last year valued at $26,774,937 or 40% of Canada's total output.

Pine production, 905,442,000 ft. B.M.
Pulpwood, 246,282 cords.
Railway Ties, 5,704,459.

Ontario's woodworking industries, using 34 different kinds of wood, provide a ready market for the lumberman. Eighty-two per cent. of lumber used in Ontario's industries purchased within the Province.

Ontario's vast resources offer unsurpassed opportunities to the lumberman.
For maps and full information regarding Ontario, apply to

HON. G. HOWARD FERGUSON,
Minister of Lands, Forests and Mines.

Edward Partington Pulp & Paper Co.
Limited

Head Office: ST. JOHN, N.B.

Mills: St. John, N.B. Blackville, N.B. Nanudogan, N.B. Marysville, N.B.

Manufacturers of—

Bleached Sulphite Pulp

Spruce, Pine and Hemlock Lumber, Laths, Hardwoods

The C. Beck Manufacturing Co., Limited

Head Office: PENETANGUISHENE, ONTARIO

Box Factory, TORONTO — **Saw and Planing Mills, Box and Pail Factory, PENETANGUISHENE.**

CHOICE 1915 CUT MILL RUN STOCK

17,000 feet 1 x 4 — 10/16 White Pine.
15,000 feet 1 x 5 — 10/16 White Pine.
60,000 feet 1 x 6 — 10/16 White Pine.
60,000 feet 1 x 8 — 10/16 White Pine.
34,000 feet 1 x 10 — 10/16 White Pine.
35,000 feet 1 x 12 — 10/16 White Pine.
17,000 feet 1 x 13 and wider 10/16 White Pine.
30,000 feet 2 x 4 — 10/16 White Pine.
35,000 feet 2 x 6 — 10/16 White Pine.
35,000 feet 2 x 8 — 10/16 White Pine.
60,000 feet 2 x 10 — 10/16 White Pine.
17,000 feet 2 x 12 — 10/16 White Pine.
17,000 feet 2 x 13 and wider 10/16 White Pine.
Also full assortment of 2 in. and 3 in. Norway.

REMEMBER: If you want any stock milled, our Planing Mill will give you the right service.

"WE AIM TO SERVE YOU WITH THE BEST"

Keystone No. 3

DISSTON

Exhibit

Panama Pacific International Exposition

Highest Award

Saws, Tools, Files

Henry Disston & Sons, Ltd.
2 Fraser Ave.
Toronto, Ont., Can.

Our Mills Produce and We Market as Much

GENUINE LOUISIANA RED CYPRESS

As All Other Concerns Combined

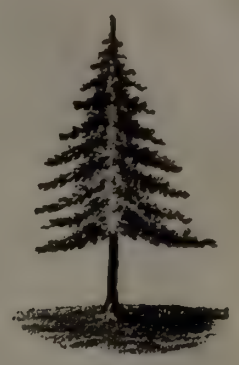
250,000,000 feet constantly in stock insures filling any reasonable order promptly.
Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

Our salaried salesmen receive credit for mail orders. Try us.

LOUISIANA RED CYPRESS COMPANY

Hibernia Building — **New Orleans, La.**

Spruce
White Pine
Banksian Pine
Birch



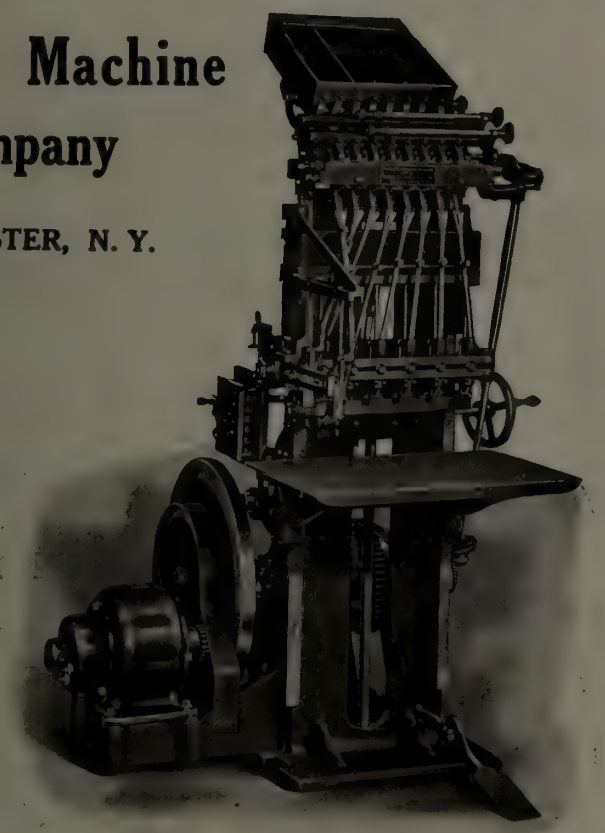
Get our stock list and prices.

—BROWN CORPORATION—

***Formerly:*—Quebec & St. Maurice Industrial Company, Portland, Maine**

Morgan Machine Company

ROCHESTER, N. Y.



Manufacturers of—

Nailing Machines,

Lock Corner Box Machinery,

Box Board Matchers,

Box Board Printing Machines.

Every manufacturer of boxes; every manufacturer who has nails to drive in any article, or packages of any kind to manufacture, should write the **Morgan Machine Company** for latest developments in machinery for the Box Industry.

Morgan Machine Company
ROCHESTER, N.Y.

TIMBERS

We have excellent facilities for speedily handling any size order for building timbers either rough or dressed in Douglas Fir and Yellow Pine. The illustration shows a corner of our timber yard and equipment for unloading and piling.

Get our prices.

The Boake Mfg. Co. Limited
Toronto, Ont.

SHELL BOX SPRUCE

Most satisfactory results assured in use of PURE SPRUCE—FREE FROM BALSAM

Piled in 1 x 4—10/16 "
1 x 5 "
1 x 6 "
1 x 7 "
1 x 8 "
1 x 9 "
1 x 10 "
1 x 11 "
1 x 12 "

MIXED IF DESIRED

ROUGH OR DRESSED

Also ***Maple, Birch****—specific widths—*
Elm, Ash, Basswood, Beech and Oak.

W. T. EAGEN, 2 Toronto St., **Toronto, Can.**

HARDWOOD LUMBER

United States Manufacturers and Wholesalers seeking Canadian Business

Hoffman Brothers Company

Fort Wayne, Indiana

Manufacturers of Hardwoods—Any Thickness From

1/30″ SLICE CUT VENEER
1/20″ SAWED VENEER
to
2″ BAND SAWED LUMBER

Reg U.S. Pat. Off. Reg U.S. Pat. Off.

Specialty:

QUARTERED WHITE OAK

LOUISIANA RED CYPRESS

QUARTERED OAK PLAIN OAK
POPLAR ASH

Yards at—Nashville, Tenn. Basic, Va.
Mills at—Sumter, S.C. Winchester, Idaho

We can ship you promptly any of the above Stock, Carefully Inspected

WE WOULD LIKE TO HEAR FROM YOU

WISTAR, UNDERHILL & NIXON

Real Estate Trust Bldg., Philadelphia, Pa.

Plant of The Stearns Salt and Lumber Co.

Stearns Quality

Michigan Hardwoods
Hemlock and Pine

Lumber and Timber

Try out STEARNS SERVICE on mixed car shipments. Retail stocks replenished over night by our 24 hour service.

HEMLOCK
WHITE PINE
HARDWOODS
MAPLE FL'G.
} *IN MIXED CARS* {
SHINGLES
LATH
POSTS
MOULDING

The
Stearns Salt & Lumber Co.
Ludington, Mich.

W.M. RITTER LUMBER COMPANY

Below is List of Dry Lumber We Can Ship Promptly

CHESTNUT:
4/4 1s and 2s, 2 cars.
5/4 1s and 2s, 3 cars.
6/4 1s and 2s, 3 cars.
8/4 1s and 2s, 1 car.
4/4 No. 1 Common, 3 cars.
5/4 No. 1 Common, 1 car.
6/4 No. 1 Common, 2 cars.
8/4 No. 1 Common, 2 cars.
4/4 Sound Wormy, 3 cars.
5/4 Sound Wormy, 2 cars
8/4 Sound Wormy, 1 car.

POPLAR:
5/8 Reg. 1s and 2s, three cars.
3/4 Reg. 1s and 2s, one car.
4/4 Reg. 1s and 2s, four cars.
5/4 Reg. 1s and 2s, one car.
6/4 Reg. 1s and 2s, one car.
10/4 Reg. 1s and 2s, one car.
12/4 Reg. 1s and 2s, two cars.
16/4 Reg. 1s and 2s, three cars
4/4 No. 1 Common, 4 cars.
5/4 No. 1 Common, 2 cars.
6/4 No. 1 Common, 2 cars.
5/8 18-23, two cars, Panel and No. 1.
4/4 24-27, three cars, Panel and No. 1.
4/4 18-23, two cars, Panel and No. 1.

BASSWOOD:
4/4 1s and 2s, 5 cars.
5/4 1s and 2s, 3 cars.
4/4 No. 1 Common, 5 cars.
5/4 No. 1 Common, 3 cars.

WHITE OAK:
5/4 1s and 2s Plain, 5 cars.
6/4 1s and 2s Plain, 6 cars.
7/4 1s and 2s Plain, 7 cars.
8/4 1s and 2s Plain, 7 cars.
5/4 No. 1 Common, 3 cars.
6/4 No. 1 Common, 3 cars.
4/4 Qtd. 1s and 2s, 4 cars.
4/4 No. 1 Common, 5 cars.

PLAIN RED OAK:
4/4 1s and 2s, 7 cars.
5/4 1s and 2s, 3 cars.
6/4 1s and 2s, 3 cars.
8/4 1s and 2s, 1 car.
4/4 No. 1 Common, 6 cars.
5/4 No. 1 Common, 2 cars.
3/4 No. 1 Common, 3 cars.

The above is a list of dry stock which we can ship promptly. All our own manufacture and band-sawn stock, and thoroughly dry. Do not place your orders before writing for prices.

CANADIAN REPRESENTATIVE:

John Hall, Box 32, Toronto, Canada

Phone College 6997

W.M. RITTER LUMBER COMPANY — COLUMBUS, OHIO — W.M. RITTER LUMBER COMPANY

DO YOU WANT A LUMBER SALESMAN?

¶ Many a "high-power" lumber salesman has been secured through a little ad in the "Wanted and For Sale" columns of this paper.

You may have other wants which this medium can fill for you. It will cost you little to try. Send your want ads to the

CANADA LUMBERMAN & WOODWORKER, TORONTO, CANADA

Machinery and Timber For Sale

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the Town of Parry Sound, Ont.; and other Lumber Equipment, including boom chains, plows, sleighs, etc.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Automatic Machine for circular saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Wood Machine for 16-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

Also, contents of machine shop, containing Planer, Drill, Lathe and Machinery, with tools necessary for repair work.

All of the above open for inspection at Parry Sound.

The

Parry Sound Lumber Co.

Limited

26 Ernest Avenue, TORONTO, CANADA

Let Us Quote You On

Your Requirements

of

Rough and Dressed Lumber and Lath

We specialize on cutting to order all sizes of

Dimension Timber

Also in Dressing in car or mixed lots 1", 2" and 3" to customers' specifications.

Complete stocks always ready for prompt shipment.

Send your inquiries.

Austin & Nicholson

Chapleau, Ontario

Steam and Gasoline Logging Engines

"DUNBAR" Logging Engines are built in Canada to meet the need for sturdy substantial engines in Canadian logging operations. A close study of the conditions existing in this industry enables us to design engines which would give the greatest amount of service at the lowest possible cost.

If you are interested in logging machinery we will send you details. Write us. We are the makers of the original Shingle Machine, "Dunbar" Lath Machine and "Dunbar" Clapboard Machine.

Remember the maker's name

Dunbar Engine & Foundry Company

WOODSTOCK, N.B.

New **RAILS** Relaying

12 to 80 pounds per yard.

LOGGING CARS

Jno. J. Gartshore

58 Front St. West, Toronto

Cheaper Than Molasses

Yes sir, "Crown Brand" Corn Syrup is the cheapest sweetener you can buy for your camp. Cheaper than molasses, sugar or maple syrup—better for beans and porridge—best for cakes, pies and puddings.

"CROWN BRAND" CORN SYRUP

is the favorite table syrup in the homes—delicious in flavour—and keeps indefinitely.

In barrels about 700 lbs.
½ " " 350 "
¼ " " 175 "
or smaller packages if you prefer them.

Any wholesaler will supply you.

The Canada Starch Co., Limited
MONTREAL

STICK TO IT

To make a success of advertising one must be prepared to stick to it, like a barnacle on a boat's bottom.

Canada Lumberman
and Woodworker
Toronto, Ontario

Announcement!

¶ For the purpose of more closely identifying its promotion work with its product, and to effect a greater individuality in its advertising campaign, the **Arkansas Soft Pine Bureau** has just been re-established at Little Rock—in its own home state.

¶ Three years ago, a pioneer in the general lumber advertising field, **Arkansas Soft Pine** has come to be known to-day as a nationally advertised product of great merit.

¶ During those three years, many retail lumbermen have seen their opportunity in the Bureau's publicity campaign,—they have bought millions of feet of **Arkansas Soft Pine** to supply the public demand which the manufacturers of that product have created for them through advertising.

¶ **Arkansas Soft Pine** is going to be advertised more vigorously than ever. The Architect, the Builder and the Public are going to be informed fully as to the various uses to which **Arkansas Soft Pine** is especially adapted and why it is superior wood for such uses.

¶ *Alert buyers will respond* to the further business opportunity thus afforded them *by investing in an adequate, well-assorted stock of* **Arkansas Soft Pine.**

¶ Inquiry and correspondence is invited. A booklet called "An Architectural Aid," as well as a set of small finished samples will be sent on request.

Arkansas Soft Pine Bureau
LITTLE ROCK, ARK.

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Deputy Minister.

Department of the Interior, Ottawa,
December 20th, 1912.

Tested to 20% Over Admiralty Proof.

Hingley's B. B. B. Chains

Stocked by all principal jobbers everywhere.

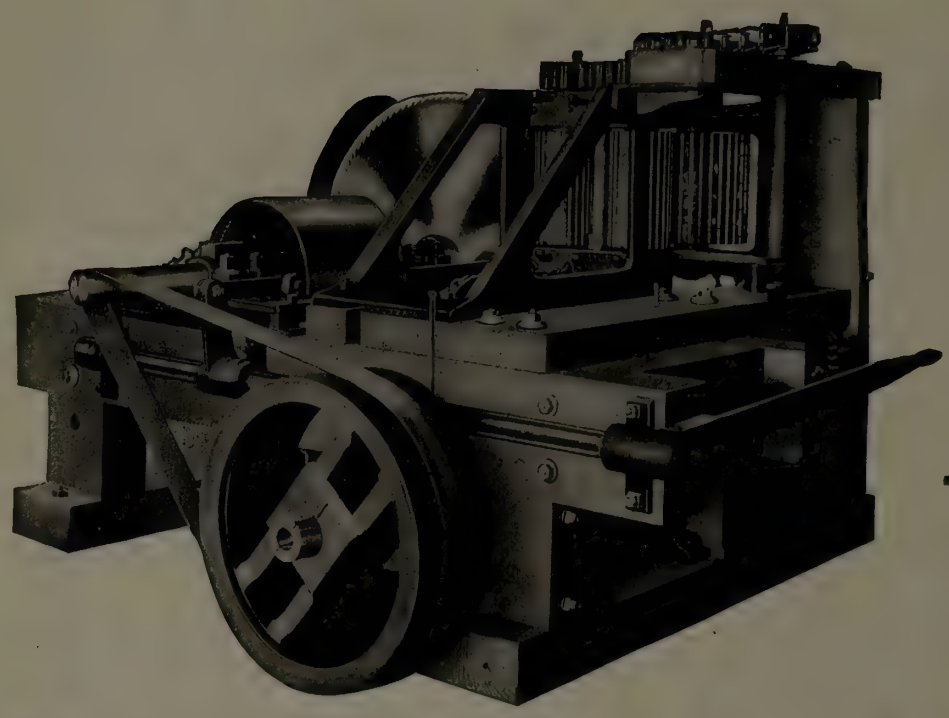
General Agents for Canada
Drummond McCall & Co. Limited
Montreal

Specialties: Boom Chains of all Descriptions, Rafting, Log Loading, Quarry, Mining, Crane and Sling Chains. All hand-made by expert workmen from Hingley's Netherton refined iron.

Agent for New Brunswick and Prince Edward Island
F. R. Whipple,
West St. John, N.B.

N. Hingley & Sons, Limited, Netherton Iron and Chain Works, Dudley, England.

McLennan's Slab Re-Saw



Our slab re-saw has a capacity of 15 to 25 thousand in ten hours from slabs 1, 2 and 3 inches thick. It will take slabs 8½ inches thick. The driving pulley is 16 inches x 14 inches and the saw 36 or 38 inches, 10 gauge. The floor space required is 7 feet x 9 feet. Speed 1,200.

This machine is a money-maker for any saw mill.

We also make gang edgers, shingle machines, lath machines, bolters, sleeper machines and sleeper barkers. etc.

Write us for literature

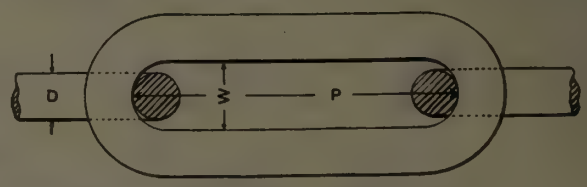
McLennan Foundry & Machine Works Limited

Campbellton, N. B.

Have You Noticed This?

In order to obviate errors and to prevent delays in shipments, we would like to have you carefully note the how of ordering conveyor chain.

You will note that we are taking it for granted that you are using our chain, but as ninety per cent of the lumbermen are, we feel that we are not taking too great a liberty.



Standard Conveyor Chain and Ajax Dredge Chain

are the leaders in their respective fields, and there's a reason—quality, service and dependability.

Standard Chain Company
Pittsburgh

MADE RIGHT—RIGHT IN CANADA

Berlin

PERFECTED WIDE RANGE MATCHERS

Meet the Demand for Lumber Good Enough To Trade - Mark

The constantly growing practice of buying trade-marked lumber is an outgrowth of the confidence that people have learned to place in an article upon which the manufacturer is willing to place his mark

Standard quality and the means of identifying it to the consumer are factors equally certain to gain for you satisfied customers By so creating a demand for your lumber, the best dealers everywhere will want to handle your product.

But you cannot obtain this good will—this "consumer demand," unless you are in a position to control the quality of your product. This the

Berlin 91 Matcher

will do for you. By making lumber good enough to trade-mark, and at lower cost, "91" manufacture sells readily at higher prices than lumber made in average mills. Lowered costs and premium prices double your profits.

The 91 is a perfected machine and standardized. Therein lies your assurance of better made lumber—lumber that you could proudly trade-mark, when you install your 91.

Let us prove our claims by telling you how the "91" is making out in mills that you know about. Ask for Pamphlet No. 91.

BERLIN MACHINE WORKS LTD.

Largest Manufacturers of Woodworking Machinery in the World

HAMILTON, ONTARIO

U. S. Plant, with Offices - - Beloit, Wisconsin

Over two years ago we printed this advertisement and this illustration, and still our bands are being improved—there's nothing that can match them.

WONDERFUL QUALITY
IN
SIMONDS
WIDE BAND SAW

What property is there about a Band Saw that will permit it to tie itself into the Chinese puzzle now illustrated in this picture?

In this case it was the tenacity of the steel.

Tough Simonds Steel.

An ordinary saw blade subjected to the pressure this blade stood while running might have torn to pieces on the wheel or would have been hopelessly cracked when taken off the mill.

But nothing like that with this Simonds Saw; not a crack or break.

Safety of employees requires efficient saws.

Simonds Canada Saw Co., Limited

St. John, N. B. **Montreal, Que.** **Vancouver, B. C.**

Canadian Made Roofings

The time was never more ripe than now for the Canadian lumber dealer profitably to handle a side line.

NEPONSET Paroid Roofing

and other NEPONSET Products, are making extra profits for many lumber dealers. Why not for you? Will you write us today for our proposition on these Canadian Made Products?

Bird & Son,
Dept. L.,
Hamilton, Ont.

Send us your book "Repairing and Building."
Send proposition on:

	Check
NEPONSET Roofings.	[ ]
NEPONSET Shingles.	[ ]
Wall Board.	[ ]
Waterproof Building Papers.	[ ]

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"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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War Orders—The Man on the Spot

For the purpose of being in a position to advise the lumber industry in Canada regarding the situation in connection with possible important business in wood goods arising out of the war, and particularly in connection with the portable house requirements of the allied governments, the editor of the Canada Lumberman visited Ottawa last week and made first hand enquiry of those members of of the government and officers of its departments who are associated with the details of such matters. The Department which is in closest touch, in this connection, with the allied governments and their purchasing commissions and representatives, is that of Trade and Commerce, the Minister of which, Sir George Foster, is in daily communication by cable and letter with the acting High Commissioner, Sir G. H. Perley.

Recently, when it was reported in the New York press that a Brooklyn, N. Y., firm had secured an order for no less than 20,000 portable houses for use in Belgium and France, Sir G. H. Perley was requested by Sir George Foster to enquire at once into the matter. The outcome of his enquiries is that official announcement has been made that no such order has been placed. To Canadian lumbermen this was good news and in some quarters steps were taken at once to organize for the purpose of being prepared to handle orders for such houses or other materials if they are forthcoming.

Portable houses will unquestionably be required in those parts of Europe that have been devastated by the war, and such portable houses, or rather the material for them can be turned out in Canada as plentifully, as cheaply, and under as advantageous transportation conditions as in the United States. How much of this business can we reasonably expect to secure in Canada and how can we best go after it On these points there has been and still is great uncertainty, but the information given us at Ottawa by Sir George Foster clears up some of this uncertainty. First, we are advised that it is natural to conclude, in the matter of portable houses, that the work of producing these houses will be done so far as is practicable in England, and the lumber and timber, in a more or less manufactured state, will be imported from such countries as can furnish it to the best advantage. From a Canadian point of view this is not all that could be desired, as Canadian woodworking plants, with their large capacities and skilled labor, are anxious to secure such business as the preparation of the finished material for these houses. It must be borne in mind, however, that English woodworking firms will be equally keen for the business, that English labor will require employment, and that upon the finished materials for portable houses the cost of freight across the ocean would be heavy in comparison with that upon material of a rougher nature. These reasons will militate against the shipment of finished portable houses in knock-down shape from Canada, or from any other country, which would compete with Canada.

WHAT ARE OUR CHANCES?—On the other hand, there are some factors which should not be overlooked, and which may work to offset these conditions. There is the possibility of competition enabling the purchasing commissions for the Allied Governments to secure abroad the materials for these houses in an advanced state of completion, at possibly cheaper rates than in England, the question in doubt is how far efficiency in production will enable Canadian firms to go in the direction of furnishing the manufactured article.

From discussions which we have had with many prominent Canadian woodworkers we are convinced that Canadians are able to lay down the finished portable house material in England as cheaply as it can be had from any other source. The case of doors for instance is one which throws an important light upon the whole situation. Canadian manufacturers of doors have, for many years, been able to secure a good volume of trade in Great Britain, even against competition of the severest kind. A very large manufacturer of doors recently spent considerable time in Great Britain. Upon his return to Canada he stated that he had not only been able to dispose of considerable quantities of doors among his old customers, but to work up encouraging new trade. Other Canadian materials, such as flooring, are also favorably known in Great Britain. The same thing can be said of several other interesting and important lines of manufactured articles turned out by Canadian woodworking plants. It is natural, therefore, to conclude that when the demand for portable house material becomes urgent Canadians will have a good fighting chance in this business.

We cannot emphasize too forcibly the great importance of studying every detail of the situation with the utmost care and preparing, so far as possible in advance, for the business when it commences to appear. The Department of Trade and Commerce at Ottawa is unquestionably very closely in touch with the most important sources of information in Great Britain regarding such matters as these, and our very definite advice from Sir. Geo. Foster, Minister of Trade and Commerce, is, that Canadian lumbermen, if they hope to obtain a good share of this business must do as other industries have done, make sure that their interests are adequately represented in Great Britain so that their ability to handle orders will be very clearly understood by the various departments and purchasing commissions of Great Britain and the allies which have their head quarters located in London. For this purpose we give the following list of buying agents for the Allied Governments:—

International Purchasing Commission, India House, Kingsway, London.

French—

Hudson Bay Company, 56 McGill Street, Montreal.
Capt. Lafouilloux, Hotel Brevort, New York.
Direction de l'Intendance, Ministere de la Guerre, Bordeaux, France.
M. De la Chaume, 28 Broadway, Westminster, London.

Russian—

Messrs. S. Ruperti and Alexsieff, care Military Attache, Russian Embassy, Washington, D. C.
Edward Fitzgerald, Purchasing Agent for the British Government, Windsor Station, Montreal.

THE MAN ON THE SPOT:—In addition to the above ad-

dresses it is probably of even greater importance to Canadian firms looking for business of this description, that they should get in touch with the Admiralty and War Office, as well as the Office of Works. Large quantities of Canadian lumber and timber have already been purchased for many purposes arising out of the war, and unquestionably the volume of this trade can be increased. Speaking with one of the greatest firms of Canadian exporters of timber and lumber to the Old Country, the Canada Lumberman was advised that this particular firm has been securing, since the outbreak of the war, a greatly increased volume of orders for lumber and timber for war purposes. This firm is an old established one, with its representatives right on the spot and gives an excellent illustration of the fact that, in order to get a share of this business, such representation is essential. The arrangement of representation in England is a question to be handled with great care. It must be decided in the first place whether representation is to be on behalf of the industry in general, or on behalf of important groups of the industry. Whatever is done the very best men the industry can produce will be none too good to be entrusted with this work, as they must meet the competition of the most skillful and best posted men among their competitors. A case in point is furnished in connection with the business in knit goods. Some time ago the knit goods' men secured a large order for Canada from the British purchasing agent. This encouraged them to seek further orders and they sent a representative to London who very soon secured an order for a million dollars worth of goods. This man recently returned to Canada to consult with his principals. He is now preparing to return to Great Britain, confident that he will secure orders for vast quantities of knit goods. The secret of his success is that he gets right into personal communication with the parties in Great Britain and is able to talk with them along definite business lines.

QUICK ACTION NECESSARY:—In all lines of business, and especially in connection with war orders, this element of personal contact is of supreme importance because of the necessity for prompt action on the part of the governments requiring the supplies. Canadians—we regret to say it—have not in the past exhibited that alertness which such a situation demands. We know of cases occurring since the beginning of the war, in which large orders have been lost and important economies made impossible, because of failure to act quickly. Whatever Canadian lumbermen, or manufacturers of portable house material may do, we believe that the success of their efforts will be measured largely by their promptness. The opportunity is at hand and no time should be lost in preparing to take the fullest advantage of it. We should act quickly and arrange our representation in London, with a special view to encourage quick action in all its work.

A further interesting point emphasized by Sir George Foster in discussing this matter with the Canada Lumberman is that the British Government has the highest possible regard for Canadian connection with all such matters as the furnishing of war goods, and is in sympathy with the desires of Canadians to secure as much of the trade arising out of the war as possible. Moreover, the purchasing commission of the allies are equally favorable to Canada. But, even with the utmost possible desire to encourage Canadian trade, the Governments of the Allied Powers and their various purchasing agents are not able to do very much for Canada unless Canadians will help themselves by following the lines which we have suggested above. At the office of the International Purchasing Commission in London, for instance, the waiting rooms are continually filled day after day with representatives from the United States, with their samples and prices, all of them ready at a moment's notice to step right in and talk definite business face to face with the head of the commission. It stands to reason, therefore, that Canadians cannot get any extensive business from sources of this nature unless they adopt similar tactics. Case after case illustrating this point could be cited. The manufacturers of jam in Canada, for instance, were at one time, not so many months ago, in rather a similar position to the Canadian manufacturers of lumber. Their representatives called upon Sir George Foster, as the Minister of Trade and Commerce, with a view to urging the Department to assist them in securing orders for their products from the British and Allied Governments. Sir Gorge Foster received them most sympathetically and gave them exactly the same advice as he has given to others and as, through the Canada Lumberman, he is giving to our readers. They took his advice, sent their representatives to London and had no difficulty in securing very large orders.

That the Department of Trade and Commerce can be confidently counted upon to assist the lumber industry in Canada to the limit of its powers, we can assure our readers is certain. The lumber industry is especially fortunate in having one of its most successful representatives in the person of Sir George Perley, occupying the important position of Acting Canadian High Commissioner at London. Mr. Perley is, both by ability and by inclination in a position to watch carefully after their interests. It will not suffice however, to depend entirely upon the good offices of a High Commissioner whose duties involve not only the promotion of the interests of the lumber industry, but the interests of every other industry in Canada. We hope, therefore, to learn at no late date that Canadian lumbermen and woodworkers have adopted measures in conformity with the suggestions so willingly given by Sir George Foster. An indication of the effective work done by the Department of Trade and Commerce in behalf of the lumber industry is afforded by the continual reports which are being published in the Weekly Bulletin issued by the Department. We have reproduced these reports from time to time as they appear and some of them are printed in this issue. An outline of the manner in which the Department places the news of impending business before Canadian manufacturers as quickly as possible, can be secured by referring to two cable messages regarding the requirements of the Office of Works, London, England, which are published elsewhere in this issue. The High Commissioner's office is in continual touch with such sources of information and, immediately upon the receipt of news of an impending order, cables the information to the Department of Trade and Commerce at Ottawa. This information is then placed before the Canadian manufacturers at a very early date in the columns of the Weekly Bulletin, and in other ways. No matter how promptly this news may reach us in Canada, however, how much better a position would we be in with a capable representative in London ready to act at once upon the receipt of such information, and to avoid the delays resulting from cabling to Canada?

Canada's Lumber Trade With Australia

The trade in wood goods between Canada and Australia has, of late months, been attracting the attention of timber merchants in both countries to a great extent. The importance of this trade was never greater than it is to-day, on account of the fact that British Columbia's export trade in wood goods has been so greatly reduced by the conditions growing out of the war, and by the industrial depression which set in some months previous to the war. It is unquestionably of the utmost importance that the markets of Australia should be studied in minute detail by British Columbia exporters, on account of the very large import consumption of the Australian markets and on account of the exceptional suitability of British Columbia timber products for these markets. To quite a considerable extent the above applies also to the trade in timber products from Eastern Canada. The Canada Lumberman has recently published much correspondence and a number of articles relating to this subject and we are pleased to be able to add to these the substance of a letter which we have recently received from one of the most extensive importers of wood goods in Australia. The letter appears elsewhere in this issue.

It is interesting to note that the writer, who does not desire that his name be published, states that most of the import trade, so far as lumber is concerned, of Australia is at present done through San

Francisco, mainly owing to the fact that San Francisco has quite a number of firms interested in the lumber business who have their local representatives in Australia. This is a point to which practically every writer upon the subject has attached chief importance. Apparently the existence of extensive brokerage establishments at San Francisco is the governing influence in the whole situation. These brokers, our correspondent says, are either represented straight out by their own offices in those countries to which the timber is exported, or by the local timber agents in the export markets. So far as the West Coast of Canada is concerned the writer states that there is an entire absence of speculative commission houses.

As everyone realizes, the export business in lumber is, by its very nature, associated with a considerable amount of speculation, arising out of the natural fluctuation in the cost of ocean transportation, insurance and exchange. Under the conditions prevailing today these fluctuations are severe and frequent so that the speculative element is all-important, and is so great as to practically eliminate the export trade in all cases where there do not exist brokerage houses which are prepared to assume charge of the speculative end of the transaction. Lumber manufacturers in Western Canada and the Pacific Coast States, like all other lumber manufacturers, are so extensively occupied with the details and the costs of their own manufacturing operations that they are neither in a position or inclined to take up the far greater risks connected with the export business. Therefore, those mills which are in touch with brokerage export houses such as those at San Francisco, are naturally in the best position to secure this business and to handle it profitably. It follows naturally, that Canadian manufacturers being deprived of the services of such brokerage houses, except with the added difficulty furnished by United States competition and better transportation facilities, are severely handicapped and are practically being frozen out of the trade.

The way this business is handled in the United States, through the San Francisco brokers is that the mills sell their product f. o. b. and do not take the risks of freights. Few, if any, of the mills would venture to quote on a c. i. f. basis. The brokerage houses buy the "Oregon" stock f. o. b. and assume the risk of freighting. They acquire steamers upon time charters and quote to foreign buyers on a c. i. f. and e. basis. Such quotations, of course, are far more satisfactory to the foreign buyer than would be f. o. b. purchases. Naturally therefore the trade follows these channels and it appears to be as certain as anything in this world can be, that it will continue indefinitely in the same way. For this reason we believe, with our correspondent, that until speculative commission houses come into existence prominently in connection with the British Columbia trade, the bulk of the orders for Australia will undoubtedly go to the United States. The only possibility, it appears to us, of this being an incorrect analysis of the situation, is that the British Columbia mills should be willing to quote on a c. i. f. and e. basis to foreign ports.

Dealing with the trade from Eastern Canada, although this is quite another matter from that of British Columbia, it resolves itself to some extent into rather similar factors. To further this trade our correspondent suggests—a point which we have frequently brought out in our columns—that the large mill owners must have their own agents in foreign ports, if they wish to secure the best results from these markets. So far, the writer states, there is an entire absence of these and only one or two concerns are handling any of this business. Those of our readers who are concerned in this trade will be interested in reading the letter referred to, which appears on another page of this issue.

Editorial Short Lengths for Busy Readers

A rather interesting situation has developed in connection with the export trade in lumber to Great Britain on account of the decline in the value of the British sovereign. Normally a sovereign in Canade is worth $4.85. Recently its value has fallen to $4.60. Lumbermen receiving payments from Great Britain for their exports find, when they have exchanged the English money into Canadian, that this drop means a decrease in their receipts of about $1.00 per thousand feet. Every five points decline in the value of a sovereign means a decline of about 20c. per thousand feet in the value of lumber.

The application of Messrs. Auger & Sons, of Quebec City and the D'Auteuil Lumber Company against the proposal of the Canadian Pacific Railway to advance the freight rates on pulpwood from a number of Canadian points to Mechanicsville, New York, via the Boston and Maine Railroad has been refused by the Dominion Board of Railway Commissioners. The Board states that the rate increases proposed are reasonable and will go into effect November 1st. The new freight rates on pulpwood to Mechanicsville will then be 13 1/5c. instead of 10½c. via Sherbrooke and Lennoxville and 11 4/5c. instead of 9½c. via Newport, from the points in question which are in the province of Quebec.

With further reference to the report of Mr. H. R. MacMillan, Special Trade Commissioner, on the market for pitwood in Great Britain, appearing in Weekly Bulletin No. 603 of the Department of Trade and Commerce, Mr. Harrison Watson, Trade Commissioner at London, has forwarded to the Department a trade inquiry, which was received from a London firm, who are desirous of importing pitwood and pit props from Canada. The props required (red, yellow or white fir) can be cut in any of the following lengths: 6, 6½, 7, 7½, 8, and 9 feet in tops of 2½ to 6 inch. The present prices it is stated rule high as 225s. per 6 x 6 x 6 feet fathom c.i.f. short cash against documents. It is also stated by the firm making the inquiry, that it is essential that arrangements for supplies should be made in the early autumn, so as to enable them to be cut during the wintertime; and it is also essential to bark them and cut off any protruding knots, enabling them thus to become fine and dry for spring and summer shipment, when the weight is reduced. This creates a saving in both sea and rail freight. The name and address of the firm in question may be obtained on application to the Department of Trade and Commerce, Ottawa. (Refer to File No. A 1737).

As a result of the contract made between the Canadian Government and the Royal Mail Steam Packet Company, exporters of Canadian food products and manufactured goods now have easy access to all the colonies that have joined in the Canada-West Indies Preferential Trade Agreement. For St. John and Halifax the arrangements are especially advantageous, as they have no rail haul to pay for in shipping to the West Indies. Even Montreal and Toronto can ship goods to the British West Indies colonies, including rail freight to St. John and Halifax and steamship charges from those ports at less cost than to Alberta and Saskatchewan.

The British colonies, party to the preferential agreement, import timber to the value of about £250,000 annually. This does not include Grenada, which has since given a preference to Canadian timber, nor Jamaica, whose import is valued at approximately $150,150. The requirements of the British West India colonies, as a whole, average about £450,000 a year. Of the islands which are independent or belong to foreign governments, and have no preferential arrangements with Canada, the largest importer of timber is Cuba, and the next Porto Rico. The requirements of these two islands are of the same general character as the British West Indies. So far as can be gathered from published official statistics, Canada supplies about £200,000 of the whole import. As the greater part of the timber is shipped through New York, some of which is undoubtedly Canadian, it is probable that the figure for Canada is much larger. Undoubtedly, the quantity of Canadian lumber supplied these markets is not adequate to the opportunities offered. The total value of the annual import amounts to over £1,600,000. Of this, Cuba and Porto Rico together import about five-eighths, the other foreign West Indies about one-eighth, leaving one-fourth as the amount of the import into the British West Indies.

B. C. Mills Take an Important Step

Organize for Handling Export Trade—Secure Services of Large London Broker—A New Era for the Trade

The major number of the large lumber producing firms in British Columbia have united under one central association for the purpose of advancing the interests of the provincial lumber industry. This means an assurance of a production of more than 1,000,000 feet per day. The association has secured the services of one of the largest firms of lumber brokers in the world, with head offices in London, as its European agents.. A guaranteed rate of freight and delivered price to any part of the world, without the necessity of negotiating with San Francisco charter brokers, will be possible shortly.

This important announcement of vital interest to British Columbia's chief industry was made recently by Mr. E. J. Palmer, of the Victoria Lumber Company, Chemainus, B. C., upon his return from attending a meeting of the B. C. Lumber Manufacturers' Association in Vancouver. The meeting was well attended, there being hardly an operating lumber mill engaged in the export business unrepresented. The primary object of the meeting, said Mr. Palmer, was to arrange for the filling of certain orders which have been secured through the efforts of Mr. H. R. MacMillan, Special Trade Commissioner. These orders represent two full cargoes, and all arrangements have been made for the vessels to carry the same. A fine spirit of optimism and good fellowship existed at the meeting, and the apportioning of these orders to the different mills was carried out without bickering, each one desiring a portion being awarded a fair share by the committee.

Mr. Palmer stated that the particular business referred to above, taken in conjunction with like orders which have been sent to British Columbia through the combined efforts of the Dominion and Provincial Governments, means the exportation by British Columbia mills of approximately 30,000,000 feet. It was his opinion that none of the large volume of business would have reached the British Columbia mills but for the aggressive and unceasing efforts of Mr. MacMillan, who has been in London for the past few months in the capacity of a trade commissioner. As a result of these orders being placed here, the off-shore mills have been kept operating when no other business was offering or other ships available, thus giving employment to a large number of men, both in the mills and the logging camps.

The immediate benefits arising from the actual orders already placed with the British Columbia mills, represents only a small part of the good work done, as Mr. MacMillan has been able to arouse the interest of the people of England in British Columbia lumber products, and has convinced them that there is an unfailing source of supply to meet their requirements. He has, in doing this work, sowed good seed in a fertile soil, which will result in the opening up of a constanly growing demand for provincial timber. Orders which have heretofore gone to United States mills will now be sent to British Columbia.

Representative in London

In order to get the maximum result from the missionary work which has been done, Mr. MacMillan some time ago pointed out that it would be imperatively necessary for the British Columbia mills to have a representative in London, prepared to quote on any quantity of British Columbia timber for quick delivery. This situation has now been met, through the association securing the services of one of the largest—if not the largest—firm of lumber brokers in the world, with head offices in London.

It was realized by the lumber manufacturers here that there was no use in making arrangements for an extensive business to be done in England and other parts of Europe unless the mills of British Columbia were united in some form of an agreement, by which a number could be depended upon at all times to take care of any volume of business which might be offering. At the meeting in Vancouver this amalgamation of the output of the mills was accomplished, by a sufficient number of the operators entering into a contract with the Canadian Trading Company, Limited, which was appointed the local agent for the associated mills, which have given an assurance of production of more than 1,000,000 feet per day.

Another important development at the meeting was the announcement that the London representative agrees, on every inquiry submitted, to quote a guaranteed rate of freight, so that the mills can quote a delivered price. Buyers will thus know immediately just what the lumber will cost them landed at its destination. Heretofore, the mills, in making quotations, have been hampered by having to negotiate through San Francisco for all tonnage required.

Advertise British Columbia

Mr. Palmer quoted from the agreement with the selling agents, which reads: "It is further agreed that the agent will advertise the products of the seller, and sell the same as British Columbia lumber." It is the intention of the mills to adopt a brand, and brand all lumber shipped by them, so that wherever the lumber goes, British Columbia will be advertised, the British Columbia lumber manufacturers being assured that the quality of their shipments will stand the most severe tests and compete successfully with lumber from any other part of the world.

Mr. Palmer also stated that arrangements are now under way which it is hoped will shortly be completed, whereby the British Columbia mills will be placed in a position to quote delivery in any part of the world, without the necessity of negotiating through San Francisco charter brokers, or, in fact, any brokerage firms whatever, save the one specially representing them. The British Columbia manufacturers have long been dependent upon United States brokerage firms for their tonnage requirements, and if they are successful in carrying through the plan, the day is not far distant when the British Columbia lumber mills will be independent.

Mr. Palmer pointed out, in conclusion, that like every other industry, the lumber business has been severely affected by the war, principally owing to the lack of transportation facilities. While present conditions continue, they cannot look for a great volume of business; nevertheless, they now feel assured that British Columbia mills have the first call on all unchartered tonnage headed for the Pacific.

Admiralty Using Canadian Timber Extensively

Some correspondence was recently passed between the Lumbermen's Section of the Toronto Board of Trade and the Acting Canadian High Commissioner, Sir George H. Perley at London, England. regarding the efforts of the Canadian lumber industry to secure as large a share as possible of war orders, will interest readers of the Canada Lumberman. The Secretary of the Lumbermen's Section of the Toronto Board of Trade, at the direction of the Section, addressed a letter to Sir George H. Perley, asking for such information as he could give which would enable Canadians to prepare in advance for any contracts which may be coming out for war supplies of lumber, timber, portable houses, etc.

Under date of August 25th the Secretary of the Acting High Commissioner wrote to the Secretary of the Lumbermen's Section of the Toronto Board of Trade as follows:—

"Your letter of the 31st ultimo which was handed to me by Sir George H. Perley with a request that it should receive most careful attention was, as I informed you in my letter of the 18th inst., placed before the Admiralty and the War Office. I have now received a reply from the Admiralty as follows:—'In reply, I have to inform you that while the serious interest taken in the matter by the Lumber Section of the Toronto Board of Trade is fully appreciated, so far as can be seen at the present time Admiralty requirements of timber appear to be covered for some considerable period (mainly from Canada) and in any case it is improbable that they will be of sufficient magnitude to necessitate the provision of special plant.'

"As soon as a reply is received from the War Office in respect of portable houses I will communicate with you without delay.

"If there is anything further you think we can do please do not hesitate to let us know. In the meantime you may rest assured that any opportunity which may present itself of furthering Canadian lumber interests, as represented by you, will be availed of.

I am,

Yours faithfully,"

W. L. Griffith.

A shipment of 1,500,000 feet of lumber was recently made by the Canadian Western Lumber Company, Fraser Mills, B. C., on the British Steamer Orange River. The vessel completed its cargo at Chemainus and Vancouver and will make delivery at a United Kingdom port.

Portable House Rumor Officially Contradicted

So much interest has been taken in the report published some time ago about a possible order for 20,000 portable houses which was said to be almost closed with a firm in Brooklyn, N. Y., that information recently furnished by the office of the Acting Canadian High Commissioner at London, Eng., setting the rumor at rest, is of importance. The secretary to the Acting High Commissioner states that neither the War Office nor the International Purchasing Commission has any knowledge of orders being given to the United States for temporary houses and both of these bodies state that they will be grateful if every possible publicity is given to the denial of this rumor, which they say, was absolutely without foundation.

Use of Douglas Fir Ably Advocated

Its Advantages Described by J. R. Chamberlain before Toronto Lumbermen—Market Opertunities Increasing

At the weekly meeting of the Lumbermen's Section of the Toronto Board of Trade on September 10th Mr. J. R. Chamberlain of the British Columbia Forest Service who has been in charge of the British Columbia exhibit at the Canadian National Exhibition delivered an excellent address upon some of British Columbia's forest products. Mr. Chamberlain confined his remarks chiefly to Douglas fir finish, Douglas fir large structural timbers, and red cedar shingles. He had been surprised he said, to find how small a percentage of Douglas fir finish was being used in Toronto as compared with other markets in eastern Canada. He understood moreover, that to some extent Douglas fir in Toronto was put upon a level with southern pine. This was a point to which he wished to take exception. The exhibit of Douglas fir at the Canadian National Exhibition showed clearly, he believed, that Douglas fir had a very distinctive finish especially in the slash grain, giving a splendid water stain effect. The United States Forest Service stated that Douglas fir was considered by many as the equal in appearance of quartered oak. In the west this was very largely recognized. There were many expensive houses in the class costing $20,000 and more in which Douglas fir finish and flooring were used. In many of these cases Douglas fir was used because they preferred it even to quartered oak. In regard to flooring, one of the most expensive public buildings recently erected in the west was the new normal school in Victoria, B. C., which was floored with edge grain Douglas fir.

Referring to the hardness of the wood Mr. Chamberlain pointed out that it was, of course, much easier to work than hardwoods, thus enabling the contractor to make a considerable saving in the cost of labor. In position, however, Douglas fir rapidly hardened up, making a very serviceable and lasting floor and pannelling that would not easily mar. The matter of cost was one which worked out greatly in favor of Douglas fir as compared with hardwoods. Quartered oak trim cost about two and a half times as much as Douglas fir and plain oak, roughly about one and two-thirds as much. The comparative cost moreover, was rapidly altering in favor of Douglas fir.

The fact that Douglas fir trim, the equal of any hardwood trim could be obtained at a price so much lower made a house trimmed in a beautifully figured varnished wood trim possible for the man of even very moderate means. At a slight additional cost, a dining room panelled with fir would make a great hit with men of small salary. The owner would be able to get a relatively better price for the house, which would more than offset the increased cost of finishing the room in this manner. Douglas fir thus presented an opportunity for the poor man to have a house, partially at least, finished in woods showing an attractive figure.

Outside of Douglas fir the principal finish wood they had to offer from British Columbia was their western mountain pine. Quite a considerable quantity of this had been sold in Ontario and even more in the eastern United States, by Chicago brokers, who sold it as white pine. The centre of the heart wood, a relatively small percentage, is similar in structure to the eastern red or Norway pine. The balance of the log is similar to the eastern white pine. Experts had not been able to distinguish this western mountain pine from white pine. The trees grow chiefly in the open and contain a percentage of large knots and a small percentage of clear. The principal grades are factory, shop and door cuttings. This lumber could be laid down in Ontario cheaper than the eastern white pine and he believed that there was a large opening for it in the sash and door industries and wherever cutting-up was necessary.

Dealing with shingles Mr. Chamberlain devoted his discussion entirely to the matter of durability. Everyone was well acquainted with the natural durability of cedar. Mr. Chamberlain described a photograph, which he has in his possession, showing a fallen cedar tree about 5½ feet in diameter, over which there had grown three other cedars which had now been cut down. A study of the stumps showed that the fallen cedar had been lying on the ground for upwards of 6 centuries. At the present time they were cutting it up into shingles. It seemed almost incredible that the tree could have lain so long in contact with the ground and exposed to the elements, and yet repelled decay.

Another indication of the decay resisting qualities of cedar was afforded by poles which they had recently taken up at the coast. Some of these poles had been in the ground for 32 years, and even at the ground line they were still in pretty good condition. It was evident that cedar was naturally a very durable wood and that if a shingle roof made of cedar was properly laid it would last for a very long time. Of course there were many reasons why shingle roofs had not always lasted a satisfactory length of time. One of these reasons was improper laying, another was the painting of shingles after they had been laid, thus prompting the growth of fungi and encouraging other wood destroying diseases. Then again many sap shingles had been laid which naturally could not be expected to last. Another point which Mr. Chamberlain dwelt upon was the importance of using the thicker grades of shingles, when a good and lasting roof was desired. The thicker grades made the roof a much more lasting one and it was important that if they desired to build up and retain a good market for their shingles they should educate the architects and contractors and the consuming public in the matter of grades.

In a conversation with Mr. Price, former acting city architect for Toronto, Mr. Chamberlain had been told that on account of the carelessness of the slate men in using poor slates and laying them badly, the demand for slate in Toronto had been greatly reduced. Mr. Price had said that the shingle men never had such an opportunity to get in at the expense of the slate roof as they had to-day, but he had also warned him that if the shingle men did not take advantage of the situation the iron roof man and the composition roof man would soon get in ahead of both of them.

Mr. Chamberlain laid particular emphasis upon the importance of using the proper kind of nails in laying shingle roofs. The most serious thing they had to fight in order to conserve the shingle market was the wire nail. He had found cases where roofs of shingles had to be replaced after 12 or 15 years, while other roofs in the same neighborhood were still sound after 60 years of service. This latter roof was, of course, laid with thicker shingle, i.e., the old split-shingle, but the failure of the former roof was caused entirely by the class of nail used, as the shingles were perfectly sound except around the nail holes, when the roof had to be removed. Wire nails rusted off near the head and caused shingles to decay round the nail holes; thus loosening the shingle and permitting the wind to tear it off. Many farmers, when this occurred, would not understand the cause and would put the blame upon the shingle. By using cut iron nails, galvanized iron, or zinc or copper nails this trouble could be prevented. This would cost a little more and frequently would stir up objection on the part of the carpenter. The additional cost and trouble, however, were very insignificant compared with the increased life of the roof.

Referring to structural timbers Mr. Chamberlain said, it seemed to be a prevalent idea that long leaf pine was a little stronger than Douglas fir. He showed tables of strength prepared by the United States Forest Service from tests conducted at their laboratory at Madison,, Wis. These tables showed that, in all three of the principal qualities of strength which were taken into account in structural timbers, Douglas fir had a little the advantage of long leaf pine. Moreover Douglas fir had a very decided advantage in its lightness, being about 20 per cent. lighter than long leaf pine. The importance of this was very evident in connection with any type of heavy construction, and particularly so in bridge construction and in railway cars. Mr. Chamberlain then dealt at considerable length with the suitability of Douglas fir in connection with mill construction buildings. Douglas fir he said, was almost all heart wood, which was especially resistent to dry rot. In well seasoned Douglas fir the risk from dry rot was practically absent. Mr. Chamberlain presented a very interesting series of figures to illustrate the advantages of mill construction buildings over reinforced concrete buildings both in the matter of cost of construction and in the matters of upkeep cost, adaptability to change, insurance, etc., making out a strong case in favor of the mill constructed building. Speaking of the fireproof qualities of proper mill construction, sprinklered buildings, as compared with reinforced concrete sprinklered buildings, Mr. Chamberlain referred to the fire which obliterated the Edison plant. Mr. Edison had stated, after the fire, that reinforced concrete buildings were shown to be fireproof, but that they had not been properly constructed. If it was the case that Mr. Edison with his extensive staff and great knowledge of the subject was unable to make sure that proper workmanship was put into the erection of his buildings, what chance would the average layman have of obtaining satisfactory results?

Speaking of mill constructed buildings, Mr. Chamberlain showed that there was very little difference in cost between ordinary construction and mill construction. The insurance cost, however, was twice as much for the ordinary construction, when both types were sprinklered. A man who put up an ordinary construction building could not get the same percentage on his money when he attempted to sell the building. The mill constructed building, moreover, was much better adapted to any changes in occupancy.

Mr. Chamberlain believed that it would be worth while to keep all of these ideas and facts at their finger tips so as to be able to make out a good case for the use of mill construction whenever the matter came up for consideration in connection with important work.

At the conclusion of his address a vote of thanks was moved by Mr. J. B. Reid, seconded by Mr. L. F. Strickland and was unanimously carried.

A Great Chance for Canadian Sleepers

Railways of Great Britain Present Exceptional Opportunity for Establishing a Large Market in Creosoted Canadian Ties

The supply of railroad sleepers for the United Kingdom has been one of the most difficult timber problems to solve since the outbreak of the war. The length of railroad tracks in the United Kingdom is, exclusive of sidings and yards, over 40,000 miles.

The importations of sleepers for 1914 was:—

Country	Numbers	Value C.I.F. Each
(1) Russia	1,697,536	84 cents
(2) Sweden	556,656	69 cents
(3) Germany	1,104,720	1.10 cents
(4) Netherlands	12,336	1.57 cents
(5) Other foreign	64,240	1.09 cents
(6) British possessions	25,648	1.18 cents

The total number of sleepers imported in 1914, an average year, was 3,461,136, equal to about 129,762,604 feet board measure and valued at $3,161,400.

The number of domestically produced sleepers used is small, consisting of Scotch pine used in Scotland and Ireland, some Douglas fir used in Scotland and Ireland, and European larch and oak used for switch timbers in England.

The Swedish and Russian sleepers consisted of Scotch pine shipped from the Baltic. The German and Netherlands supply consisted of Scotch pine from Russia, Germany, and Austria, shipped through German and Dutch ports. These four sources of supply were shut off immediately on the outbreak of the war.

There are over one hundred railway companies purchasing sleepers in England, each with slightly different requirements. The specifications for each company remain practically unvaried from year to year. Copies of the specifications issued by the leading railway companies have been forwarded to the Commissioner of Commerce, Ottawa.

Terms of the Specifications

The important terms of the specifications, which are common to nearly all the companies, have been:—

1. Nearly all the sleepers are purchased either in hewn blocks 10 in. by 10 in. by 8 ft. 11 in. to 9 ft., which the railway companies split into two sleepers, or in sleepers 10 in. by 5 in. by 8 ft. 11 in. or 9 ft. When blocks are purchased one inch of wane is allowed on each corner. When sleepers are purchased one inch wane is allowed on two corners only.

2. Sleepers must not have the heart of the tree further than one inch from any surface.

3. Timber must be free from bark, shakes, splits, large loose or decayed knots.

4. The requirements for delivery of the sleepers vary, but the various companies usually require the sleepers to be delivered, creosoted, according to their individual specifications, or uncreosoted, to their trucks at places and on dates named in the specification.

5. The companies purchasing sleepers also insist on the privilege of inspecting and rejecting sleepers after their arrival in England.

6. Payment for the sleepers is usually made in full, in from fourteen to sixty days after delivery of the sleepers.

7. Some of the companies insert in their contracts clauses making the contractor responsible for any loss they may suffer through having to buy sleepers elsewhere, in case the contractor fails to deliver the sleepers at the stated time.

Sleeper Merchants

The above requirements on the part of railway companies have resulted in the development of timber firms who specialize in the delivery to the railway companies of sleepers manufactured or creosoted to their special requirements.

These companies receive all the inquiries issued by the railway companies, buy the timber, creosote it, if required, and take the responsibility for the delivery of the sleepers at the points named by the railway companies.

When the sleeper trade was forced into new channels this year many shippers made contracts directly with the railway companies but it is doubtful if the shippers or the railway companies will find it more profitable or satisfactory to do business directly than through the medium of the sleeper merchant, or British timber merchant, who finances the transaction and looks after the creosoting and the handling of the timber between the ship and the railway trucks or storage yards and markets the timber rejected by the railroad.

The railroads and sleeper merchants ordinarily carry a six to ten months' supply of sleepers on hand in England, seasoning, or passing through the treating process. The existence of this supply, together with the decreased use of sleepers brought about by the enlistment of railroad employees and the curtailing of maintenance expenses enabled the railway managers to look about them for a new source of supply to carry them through the period of the war.

Kind of Sleepers Used

Before the war very little experimenting had been done with woods other than Scotch pine from Sweden, Germany and Russia. This timber creosoted so satisfactorily and with a treatment of 8 to 10 pounds of creosote per cubic foot, held spikes and screws and gave such a life of service, usually fifteen to twenty years, that practically all railroad engineers were disinclined to try new woods. There had, from time to time, been importations of jarrah, various West Indian hardwoods, Californian redwood, and twelve years ago, a fairly large shipment of Douglas fir sleepers from Canada. This shipment had creosoted well and the sleepers are still giving good service in the tracks of the Great Western Railway Company.

Within two months after the outbreak of the war, the representatives of an American pitch pine sleeper company had explained the merits of pitch pine sleepers to two conferences of the engineers, managers and purchasing agents of the thirty or forty railway companies, claiming that uncreosoted pitch pine sleepers would last twenty years. As a result of the aggressive methods of the firm selling pitch pine sleepers and because the pitch pine district of the United States was the most accessible territory in a position to ship large quantities, the greater part of the requirements of the railways have been filled in pitch pine.

Pitch pine sleepers have been sold f.a.s. at American ports for about 75 cents each, and the delivered cost c.i.f. English ports during the past three or four months has been $1.50 to $1.75 each. Since the shipments of pitch pine sleepers have begun to arrive, it has been observed that many of the sleepers are manufactured from inferior species of pitch pine, and that the grade of timber sent forward in some shipments is poor. The creosoters have found pitch pine a difficult wood to handle for the reason that in the same shipment there will be mixed together sleepers of such varying qualities and grades that when sent into the creosoting cells there will be in one charge sleepers that will absorb only three pounds per cubic foot, and others that will absorb twenty pounds, a result that is unsatisfactory both to the railway companies and to the creosoting firms.

Opening for Douglas Fir

It is encouraging to know that the one company with any experience of Douglas fir turned immediately to Canada for a further supply of sleepers of this timber. It is important that in a country where engineering specifications are drawn up with such care as in England, there should be several hundred thousand Douglas fir sleepers giving good service in the tracks of one of the best-managed and best-built railroads.

Amongst the uninformed in England, it is believed that Douglas fir is not durable, that it does not creosote satisfactorily, and that it is generally unfitted for railway sleepers. Such prejudices, which depreciate the value of the timber for many uses as well as for sleepers, can only be removed by the service which Douglas fir is now giving in British railroads.

The further purchases of this year will be of value in making the timber more favorably known to railway engineers.

Strangely the reputation of Canadian Douglas fir is being assisted by the use of timber of the same species grown in Ireland and Scotland. The prices offered for railway sleepers, four shillings each in the plantation, led to the cutting of some plantations of Douglas fir and the railway engineers receiving the timber pronoucned it the most satisfactory for sleepers of any of the timbers passing through their hands.

The War Office in purchasing for military purposes has filled over half of its requirements in Douglas fir. This use of Douglas fir will give it an added standing amongst engineering authorities in Europe.

Abnormal Prices for Sleepers

It is believed by many railway authorities in Great Britain, that the preesnt abnormal prices for sleepers will be maintained for at least one or two years, before sleepers again reach the range of prices given in the table at the beginning of this report.

This belief is based upon several premises. The three important countries supplying sleepers to Great Britain were Russia, Germany and Sweden. During the war Russia is not producing a surplus of sleepers owing to the scarcity of labor and the difficulty of financing the production of a community, which it might be necessary to hold

another year before marketing. Russian sleepers are "driven" down the rivers flowing into the Baltic and over a year is required from the opening up of the logging camps to the delivery of the manufactured timber in Great Britain. The German sleepers are cut from German state forests managed under strict Government supervision. The quantity of timber to be cut each year in these forests is determined by the Government and may not be exceeded. The stock of timber on hand in the German forests had been allowed during the past years to accumulate in order, it was believed, that a reserve might be accumulated against a possible period of war. This reserve is now being drawn upon rapidly both to render timber importations unnecessary during the war and to enable Germany to export timber to Holland and Switzerland, and thus improve so far as possible, her financial position. The cutting of the German forests at an accelerated rate during the war, the possible effect of invasion on those forests, the great demand for timbers that will result in the region bordering on Germany, and probably in Germany itself, upon the conclusion of the war, will almost certainly shut off the export of German sleepers.

The Swedish sleepers will probably come forward in the same volume, but the forests of Sweden are also being cut at a rate at least equal to their productive capacity and the well-known policy of the Swedish Government which forbids over-cutting on either state or private timberlands, together with the demand likely to exist for other timber products may be depended upon to render unlikely any great increase in Swedish sleeper exports.

Cost of Production

Another factor to be considered is the future cost of production of timber in European countries. Should the cost of living increase, and wages increase, as many authorities predict, the price of sleepers, of which labor forms seventy-five per cent. of the total cost, cannot be reduced to the level ruling before the war, provided the demand remains constant.

There is every prospect that the demand for sleepers will remain constant. The commercial railroads of Europe are now on short commons. After the war it will be necessary to restore them to their previous condition, and the demand for sleepers will be greater than it has been at any time in recent years.

There should therefore be an excellent opportunity for Canada to compete. The competition must be based, for the present at least, upon the possibility of meeting American pitch pine in price. Should the next year or two confirm the opinion of several British railroad engineers that pitch pine is not eminently suitable for railway purposes, the railway companies may be convinced of the necessity for paying slightly higher prices for other timbers.

Future Prices of Sleepers

Under present conditions of shipping, it is difficult to estimate future prices for sleepers but for the guidance of those interested in the market the maximum price for sleepers containing 37½ board feet each may be fixed in the neighborhood of $1.80 each, uncreosoted, c.i.f. British port. At this price it should be possible for Eastern Canadian sleepers to compete in the British market with the American pitch pine sleepers. British railways have not used Eastern Canadian cedar or jack pine sleepers, but have broadened their specifications so during the past few months that they would probably accept such timbers.

British rolling stock is so much lighter than Canadian rolling stock and the tracks so well ballasted that any sleeper capable of being creosoted and hard enough to stand the wear in Canadian tracks will give the required service in Great Britain. British railways will also accept larch (tamarack), beech, maple and birch sleepers. At the present rate of freights from Eastern Canada the f.a.s. price of sleepers to the shipper would be 95 cents to $1.15 each, a price much in advance of that now paid for the same class of timber in Canada.

Prices might decline very much in Great Britain and, with declining freight, still leave the Canadian shipper an excellent market for his timber, now that the possibility as well as the necessity of using timbers other than his favorite Swedish redwood has been forced upon the British railway engineer.

Size of Trees Used for Sleepers

British railways are now using for the first time sleepers sawn and hewn from trees large enough for only one sleeper, the heart being near the centre of the sleeper. In the past sleepers have all been made from trees large enough to produce a log ten inches square; this log or "sleeper-block," as it is known in the trade, when split produced two sleepers, each with the heart of the tree less than one inch from the surface of the sleeper. Insistence on this location of the heart has been an important point which would rule out any trade in sleepers from Eastern Canada where sleepers are nearly all manumactured from trees too small for the production of ten-inch blocks.

Now that necessity is resulting in the broadening of specifications, there is an excellent opportunity for Canadian shippers to induce British railways to accept jack pine, cedar, and tamarack sleepers, hewn or sawn to British sizes. Such sleepers would be in no way inferior to the Swedish redwood now used in the United Kingdom. The quantities and prices of the above three species of sleepers purchased in Canada in 1914 are given below:—

z	Number	Value each
Jackpine	8,379,064	43 cents
White cedar	2,651,319	48 cents
Tamarack	1,507,902	44 cents

is an indication that there may be a supply available for export and that the price would be low enough to permit of a profitable export trade.

At the prices quoted above, which were the average paid by Canadian railroads in 1914, Canadian sleepers could, under existing freight rates, be delivered to British railroads for a lower price than is now being paid for American pitch pine.

There is no question but that the sleepers ordinarily used in Canadian railroads would give as good service on British railroads as the loblolly and shortleaf now being imported from the United States under the name of pitch pine.

Prospects for Douglas Fir

The prospects for shipments of Douglas fir sleepers from Western Canada to Great Britain are not good for the immediate future because of the high freight rates. The British Government has under consideration the transportation to Great Britain of Douglas fir sleepers purchased by English railroads some months ago. But while tonnage is in as great demand as at present both the Government and the railway companies feel it advisable to purchase such supplies of sleepers as may be secured near at hand. Occasional cargoes may be purchased in Douglas fir when not needed for immediate delivery and when there is a prospect of a Government collier returning to Great Britain from the Pacific.

As shipping rates become more normal the prospects for Douglas fir sleepers will improve.

It is not expected that sleepers will sell for less than $1 to $1.20 each c.i.f. British port until one or two years after the war. Freights should decrease before that time to a point which will allow Douglas fir to compete with pitch pine.

Methods of Doing Business

Any person desirous of keeping in touch with the sleeper market in the United Kingdom should arrange to do business with one of the established firms of sleeper merchants, a list of whom is in the hands of the Commissioner of Commerce (refer File No. A-1764). These merchants not only supply British railroads but also do a large business with the railroads of Holland, France and other continental countries.

A Pioneer Lumberman Gone

A pioneer lumberman of Ontario passed away recently in the person of James Corcoran, who at the time of his death occupied the position of bursar at the Toronto Asylum. During his active business career few Canadian merchants were so well known and so highly respected. Mr. Corcoran came to Canada from Ireland during his youth, and entered into business at Stratford, Ont., as a wholesale grocer, enjoying marked success and accumulating a considerable fortune. In addition to his mercantile business, he cleared up a large area of swampy timber limits in Perth County, and by a drainage system made the land cultivable. The liberality and thoughtfulness he displayed for his clients and business associates is still favorably remembered by many residents of that county. Other important enterprises which he was associated with include: The Keewatin (Rat Portage) Lumber Company, Wisconsin Lumber Company, the Thompson & Williams Machinery Company, British Mortgage Loan Co. of Ontario (president), Perth Mutual Fire Insurance Co. (one of the founders), Stratford General Hospital (one of the founders and First Honorary Treasurer). Retiring from business in Stratford, he entered the firm of McBride, Corcoran & O'Connor, distillers, Windsor, Ont., which business was taken over by Messrs. Hiram Walker & Sons, Walkerville. In 1892 he was appointed bursar at the Mimico Asylum,

It is one of the bright spots in Canadian politics to note that, although Mr. Corcoran had long passed the Civil Service age limit, when a change of Government took place, his services were retained and he was honored with cordial appreciation of "duties well performed" up to the time of his decease. One unusual circumstance during his long life deserves special mention—he sacrificed a large part of well-deserved fortune to sustain a business which had no claim upon him beyond the desire to benefit and keep moral good faith with others who were interested; in fact, he proved the truth of the saying "that his word was as good as his bond." Mr. Corcoran was a warm friend of the late Alex. Mackenzie, Premier of the Dominion Parliament. In 1874 he unsuccessfully contested North Perth, but after the death of his wife and eldest son about 1881 he retired from active politics.

Progressive Retail Lumber Merchants

Modern Equipment for Handling and Delivering Stock for a Large City Trade —The Boake Manufacturing Company, Ltd., Toronto

Timber Handling Crane at Boake Manufacturing Company's yard, Toronto.

Modern Facilities for Timber Dressing—Boake Manufacturing Company's Plant, Toronto.

About twenty-three years ago, the Boake Manufacturing Company, now one of the most successful and aggressive retail lumber firms in the city of Toronto, commenced operations in a very modest way, near Dartnell Ave., Toronto, on the north side of the tracks of the Canadian Pacific Railway. Their building, yards and the whole outfit occupied a space of about one half acre of land. The company was started by Mr. W. F. Boake and his son, Mr. G. Wilfrid Boake, the latter being manager, a position which he has continued to occupy up to the present. From this comparatively small beginning the company, under Mr. G. W. Boake's direction, quickly increased its volume of business and in 1902 it was found advisable to take out letters of incorporation. Shortly after this, on December 27, 1902, the company suffered a practically total loss by fire, the only thing left of their plant and stock being the rough lumber in the yard. Preparations were immediately made for resuming operations. The plant was rebuilt and soon the company was doing a larger business than ever.

In 1905 the arrival of the Niagara Power Company made it necessary for the company to vacate its property. Inconvenient as such a change was, it happened to be the turning point in the company's business operations. Finding it necessary to move Mr. Boake enquired into the possibility of increasing the company's accommodation, with the result that, after the Niagara Power Company had bought them out from their old site, they acquired a new one, which afforded them ample opportunity for growth. The location of the new site practically adjoins the old one, being a little to the east and north of the latter, and covering in all about six acres, which the firm succeeded in acquiring from time to time in four different adjoining parcels. The company's operations have been continued on this site up to the present day. Their yard and offices are now bounded by Kendall Ave., on the east, Davenport Road on the north, Dartnell Ave., on the west, and the C. P. R. tracks on the south.

In addition to dealing in an extensive variety of lumber and timber the Boake Manufacturing Company carry on a large planing mill business. The planing mill plant is located, as will be seen from the accompanying plan, near the southwest corner of their property and is placed in such a way as to offer the greatest possible facility for quick and efficient operation. Surrounding the planing mill on the north and east are the stocks of lumber and timber in the yard. A C. P. R. siding runs north through the yard with stocks of lumber and timber to the east of the track and planing mill, timber hoisting crane and other stocks to the west. Stock can thus be moved from the yard to the planing mill with the least possible amount of effort and loss of time. From the planing mill it is moved to the lumber sheds which adjoin it on the west, as will also be seen by consulting the plan.

Modern Planing Mill Equipment

The planing mill is about 135 feet wide and 116 feet long. The lumber sheds which adjoin it are 64 ft. long x 210 ft. wide, divided into five sheds. The stock from the machines feeds directly from the mill into these sheds, which have a storage capacity for about 1,000,000 feet of dressed lumber and 7,000 doors. Driveways run through the centres of the sheds providing good facilities for loading and shipping stock.

The office is located in the southwest corner of the company's property and is a two storey building with ample accommodation

Up-to-date Delivery—Loading a truck at Boake Manufacturing Company's yard, Toronto.

Up-to-date Delivery—Unloading at the job—The Boake Manufacturing Company, Toronto.

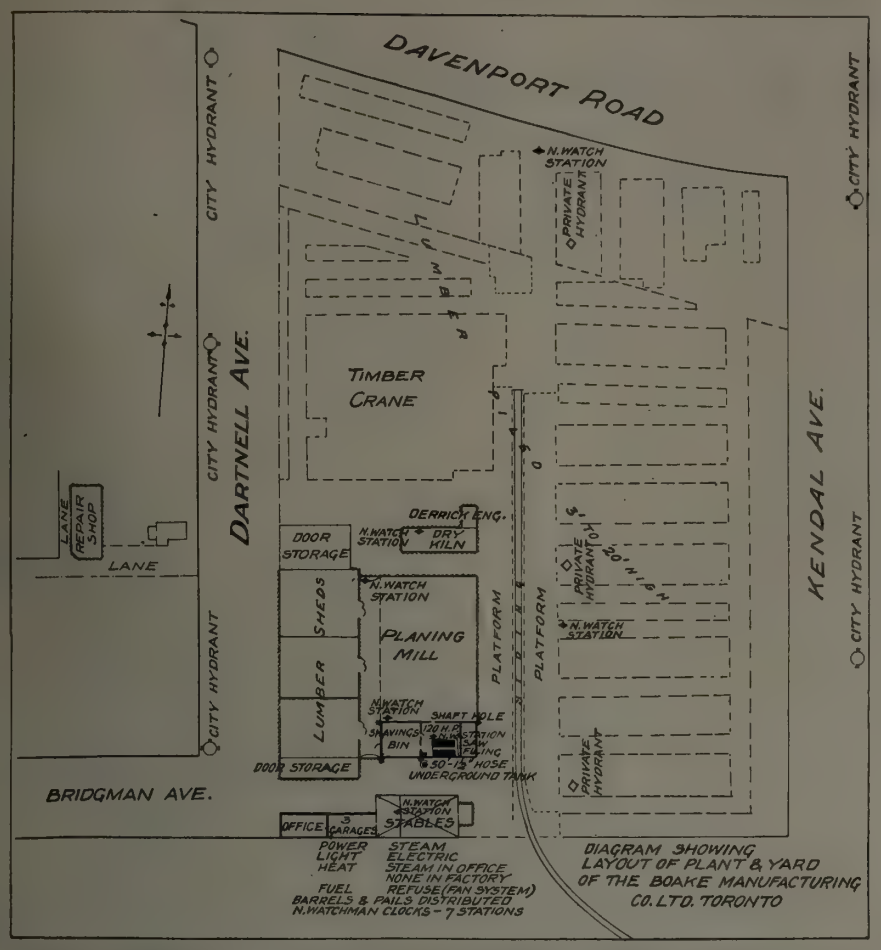


Diagram showing Layout of Boake Manufacturing Company's Yard and Plant.

for the extensive staff employed. Adjoining the office are three garages where the company's motors are kept.

In order to facilitate the handling and sorting of stock in the yard the railroad siding is depressed so that the platform of an ordinary flat car is on a level with the ground of the yard. This makes the unloading of the railroad cars a very simple operation. For the movement of stock about the yard and through the planing mill the company have 67 two wheel lumber buggies which enable them with much ease to sort the different sizes and grades of stock as soon as they are received.

Handling the Heavy Timbers

A very interesting and important part of the equipment in the yard is shown in one of the accompanying illustrations, in the form of a large timber crane. In the early days of the company's history it was found that the moving of heavy timbers was an extremely difficult and expensive operation when carried out simply by human power. Mr. G. W. Boake investigated the possibility of installing a crane for this work and after considerable travel and search was successful in finding exactly the class of crane that he required. As will be seen from the illustration, the crane is of the derrick type. It will raise a load of six tons. This may be taken from the railroad cars upon the siding and placed in their proper piles in the yard. The crane is also used for transferring stock from the piles to the small lumber buggies upon which it is moved to the planing mill. If rough timber is being delivered from the yard the crane can make the loading direct upon the delivery wagons or motor trucks. It is operated by a three-drum twin cylinder, steam hoisting engine. The man who adjusts the tackle in the yard signals by means of an electric annunciator to the engineer who operates the crane. At the time the accompanying photograph was made the crane was hoisting three large timbers from a railroad car to one of the piles in the yard.

An order of Dimension Leaving Boake Manufacturing Company's Yards, Toronto.

Another interesting bit of equipment in the yard is the timber boring machine which will bore a hole lengthwise through a stick of timber up to 24 feet long. The hole can be made of any diameter from ½ in. up to 4 in. The boring machine is driven by an individual 20 h.p. motor.

The Boake Manufacturing Company carry in stock at all times a large variety of lumber both plain and dressed. Their stock includes hemlock lumber, joisting and timber; red pine lumber, scantling, joisting and timber; Douglas fir timber up to 14 in. x 20 in. x 40 ft., Georgia pine finish joisting and timber. In dressed lumber they carry such stocks as white and Georgia pine stock trim; stock finish in oak, ash and birch, ⅜ in. and ⅞ in. plain and quarter cut oak, maple and birch, end-matched flooring, stair stuff and verandah stuff, including all kinds of built columns. In doors, the company carry a wide variety of stock doors in oak, ash, fir, birch and white pine and they are also equipped to furnish doors of any description to architects' details.

A little to the north of the planing mill is located the dry kiln, which was furnished by the American Blower Company of Detroit. This kiln has a capacity of 40,000 feet of lumber.

The equipment in the planing mill enables the company to turn out a wide variety of building material and to keep on hand a sufficient amount of such material to meet the current demand. This equipment includes a planer and matcher made by the American Wood Working Machinery Company of Rochester, N. Y.; one fast feed planer and matcher made by the Berlin Machine Works Ltd., of Hamilton, Ont.; one band resaw made by Connell & Dengler, of Rochester, N. Y.; 2 self feed rip saws; one 10-in., one 12-in. and one 14-in. four sided outside moulder. The self feed rip saw and the three moulders were furnished by Cowan and Company of Galt, Ont. In addition to the above machinery the equipment includes one cut-off saw and one timber sider which will dress four sides of timber up to 17½ in. x 24 in., of any length.

For the transportation of heavy timbers in the planing mill, the building is equipped with overhead cranes making it easy to handle these large pieces of stock. These cranes are located so as to serve for handling stock to the planer and the resaw. There is also a crane for taking the dressed timber from the planer and loading it on to wagons or motor trucks for delivery at the jobs.

The experience which the company passed through in connection with its severe fire loss resulted in the utmost care being taken to prevent a repetition of such a disaster. Throughout the yard and plant there are now located seven night watch stations and three private hydrants, which are all indicated upon the plan. The plan also shows that the yard is well protected by five city hydrants located on its eastern and western boundaries. Throughout the yard and the buildings the company have installed an up-to-date sprinkler system. By means of all these precautions against the outbreak of fire they have been able to reduce their flat insurance rate from $4.65 per hundred dollars to $1 per hundred.

Modern Delivery Methods

The facilities which the company has for delivering stock upon jobs in Toronto and its surrounding district are extremely efficient. They consist in the first place of two 3 ton Packard motor trucks. One of these is now running in its 4th season and the other in its third season. Last year the company added to this equipment a trailer, the operation of which is shown in one of the accompanying illustrations. In addition to its motor trucks the company has a splendid outfit of horses and wagons. A little to the west of Brunswick Ave., a few yards away, the company has its repair shop for work upon the motor trucks, wagons, etc. This shop is equipped for up-to-date work of this kind, including repairs. Upstairs, above the repair shop, is located the paint shop. The building is two storeys, 25 ft. x 60 ft. and is fitted with a Fensom elevator for raising and lowering the wagons to and from the paint shop.

A Good Year for Laurentide Company

The Laurentide Company, Limited, Grand 'Mere, P. Q., had a very good year in 1914-15. The profits from ground wood, sulphite. and paper increased from $829,903 to $943,272, but those from lumber and miscellaneous decreased from $115,054 to $91,333—the total being a gain of $89,648. After deducting prior charges the net profit was $807,191, against $730,774, with a surplus of $211,191, compared with $134,774. At the annual meeting on September 7, Mr. G. Cahoon, Jun., the vice-president, stated that they had had a very successful drive, and had secured the largest number of logs in the company's history. He also stated that, as to the new development, one unit expected to start about November 1; two more a fortnight later, and the entire six by January 6. The cost of the 125,000 horse power would be within the $5,500,000 estimated. 100,000 of the horse power developed will be sold to outside concerns.

Lumber and Its Interests at C. N. E.

Lumbering Industry and Its Allied Activities Attractively Illustrated by Varied Displays—British Columbia's Excellent Products

There was no lack of interest for lumbermen at the Canadian National Exhibition at Toronto this year. Everyone concerned with the production, sale, or working up of lumber products found many exhibits specially connected with his work. Exhibits of forest products, woodworking machinery of many kinds and the products of planing mills and woodworking plants were numerous, and gave one a good idea of the latest and most important developments in the trade and industry. Among the exhibits were the following:—

British Columbia's Fine Display:—The exhibit of British Columbia's finest lumber and shingles shown by the Forest Branch of the Department of Lands of British Columbia was exceedingly interesting and attracted much attention. It convinced all those who studied it that B. C. Douglas fir is equal if not superior in beauty and finish to oak and many other expensive hardwoods. A point which was brought out strongly by the exhibit and by those in attendance was that Douglas fir is not only stronger but is 20 per cent. lighter than its most serious competitor, longleaf pine. One of the most attractive features of the exhibit was the display of red cedar shingles. These shingles do not warp, work loose or rot out. The thicker shingles such as XXXX or XXXXX when put on with cut iron galvanized wire nails furnish an exceedingly economic and long-lived roof.

The display of finish lumber, shingles and other forest products which made up the exhibit this year drew almost extravagant ex-

British Columbia Exhibit at the C.N.E.

pressions of admiration and wonder from the visitors at the exhibition. Not only were the visitors impressed by the enormous extent and variety of the timber resources of the Pacific provinces, but also by the very forcible demonstration of the desirability and adaptability of B. C. woods, when put to the commoner commercial uses. The exhibit occupied a space of about 75 ft. long and 15 ft. deep. The back and one end consisted of a continuous built-up wall of B. C. woods. The other end was occupied by a model office. The built-up wall was 13 ft. in height. The base was of Douglas fir, and above it, for a distance of 6 ft., panels were set in of the principal B. C. woods, stained and varnished and in the natural. Swinging sections of roof made of the nine principal grades of B. C. shingles were also shown. Above the plate rail extended one piece fir veneer panels, 4 ft. in width and 7 ft. long. The foreground of the exhibit was occupied by racks of doors, shingles, red cedar and fir poles and pines, natural and creosoted, and racks showing B. C. planing mill products, such as car, tank and silo stock, siding, flooring, partitions, ceiling, wainscoting and mouldings. Each wood was shown manufactured into patterns indicating the uses for which its special properties adapted it. Numerous explanatory cards drew attention to the uses and qualities of the different woods.

Among the interesting information handed out by those in attendance at the B. C. exhibit was the following:—Nearly the whole of British Columbia's land surface, except the summits of the mountains, is covered with forest growth. Above 30,000,000 acres bear a merchantable stand of timber, estimated to cut 400,000,000,000 feet board measure of lumber; 35,000,000 acres are covered with second growth which will produce merchantable timber in from 50 to 150 years. About 100,000 acres are being harvested each year, yielding 1,500,000,000 feet of lumber. The cut will be increased until it equals the annual growth, which is estimated to amount to 5,000,000,000 or 6,000,000,000 feet.

The unparalleled dimensions reached by trees of the Pacific forests and the remarkable quality of their wood is due to a mild, wet climate, which permits them to grow rapidly but evenly for hundreds of years. The fertile soil and abundant supply of moisture at the same time ensure great density of the stands, and consequent competition of the severest kind for light. Each tree must unceasingly extend its crown upward or lose out in the fight for existence. As a result the shaded branches die before reaching any considerable size, and are soon broken off, leaving the trunk smooth, ready for deposit of the tissue which, free from knots, yields the clear lumber for which British Columbia timbers are noted.

The average age of trees cut for lumber in the coast forests is over 300 years for Douglas fir, 500 years for cedar, and 200 years for hemlock and spruce—time enough to produce good lumber.

Elsewhere in this issue we have published an interesting address by Mr. R. J. Chamberlain, upon the uses of B. C. forest products. Mr. Chamberlain was in charge of the exhibit at the Canadian National Exhibition.

The International Time Recording Company of Canada, Limited, Toronto, exhibited a full line of their well-known "International" time clocks in the Industrial Building. Over 260 different styles and sizes of clocks are manufactured by this company, suited to every line of business. One of the features of the exhibit was their Dey Dial Recorder, the only completely automatic recorder shown in Canada. With this clock the employee simply presses the lever, everything else, even the actual printing of the payroll sheet, is taken care of by this wonderful recorder. Every feature of the machine—the setting of the printing mechanism, the selection of the printing place on the payroll sheet, the selection of the color of the record, the printing of the record accompanied by a ringing of a bell and an automatic adjustment for the next record, is autimatically attended to. The company will be glad to send illustrated catalog to anyone interested, on request.

The Brantford Roofing Company, Limited, Brantford, Ont., made a feature of their Climax sheeting, insulating paper and building papers of various kinds, in addition to their roofing. They also have various lines of paint, specializing the "Roof Leak" paint and the Superior Roof Coating. Asbestos shingles are another of the products of this well-known company.

The Bateman-Wilkinson Company, Limited, Toronto, exhibited on the grounds a full line of their manufactures. This company hold the patent rights on the "Brazil Patent" snow plow, which is so well known in every camp from the Atlantic to the Pacific.

Maples, Limited, Toronto, exhibited a full line of their products in the Manufacturers Building. Their pickles, jams and maple products are well known to the trade and in their new and modern factory they are well equipped to take care of all orders.

The Caldwell Feed and Cereal Company, Limited, Dundas, Ont., exhibited in a tent on the grounds a full line of their different feed manufactures, among those being Caldwell's Molasses Meal, which is finding such favor among lumber camp men throughout the country. It is an ideal feed for camp horses, being easily handled, requiring no dilution with water, contains the proper amount of sugar necessary for camp horses, keeps the horses free from colic, intestinal disorders and worms, and is inexpensive.

The Canadian Consolidated Rubber Company, Limited, had a splendid exhibit of their different lines of "Dominion" rubber goods in the Industrial Building, in charge of Mr. W. G. Martin, their Toronto sales manager. Among the lines of interest to the lumber trade were their power transmission belting, fire hose, packing and lumbermen's boots. Their "Lumber King" belting especially adaptable for sawmill work, came in for a lot of attention, as well as their lumbermen's boots. The latter are finding special favor with the logging trade. They are made by the new vacuum process, with heavy leather tops, and are light in weight, easy on the feet and durable in wear.

The Shurly-Dietrich Company, Galt, Ont., had a splendid display of their "Maple Leaf" line of saws and tools in the Industrial Building upon a large section of wall space. This method of exhibiting rendered the display one of the most noticeable and attractive at the exhibition and showed to advantage the fine qualities of the production of this company. The complete line of products of the Shurly-Dietrich Company is entirely of Canadian make and they claim to be the largest manufacturers of saws in the British Empire.

The Laidlaw Lumber Company, Limited, Toronto, made an in-

teresting display of the different styles and kinds of doors, interior trim, etc., which they handle.

Batts Limited, Toronto, well sustained the merits of Canadian-made products, by their splendid exhibit of fir, pine and veneered doors, columns and interior finish in the Process Building, and the crowds constantly around their booth spoke for the appreciation of their products which compares favorably with anything of the kind manufactured on the continent. A handsomely illustrated catalog showing their complete lines was given away to hundreds of interested specators. Besides their exhibit in the Process Building, greenhouse construction, in which they specialize, was also shown on the grounds.

The Elliot Woodworker Company, Limited, Toronto, showed their Elliot Woodworking machine which they first exhibited at the Canadian National Exhibition five years ago. Since that time they have made many important improvements to the machine and have now some 600 or 700 in use in all parts of the country. One of the latest improvements is an index plate in the centre of the machine which permits it to be set to any degree for sawing any mitre. The machine is also equipped with a tilting table. By tilting the table and centering the machine to any angle, combined mitres can be cut for jack rafters, etc. The machine is exceptionally portable and can be put on the job, where all joists, studding and rough lumber are cut. It will also handle the doors and window frames. Stair strings can be housed out with this machine and the very finest trim in the building can be handled. Last fall the Elliot Woodworker Company, Limited, opened a branch factory and office at 2405 Woodward Avenue, Detroit, Mich., and they report that they have already worked up an excellent business in that city. The Elliot Woodworker is particularly suitable for retail lumber yards, as, being portable, it can be moved to any position in the yard to cut up special orders.

The Canada Machinery Corporation, Limited, exhibited in Machinery Hall, many of their widely known tents of woodworking machinery, including molders, tenoners, chain mortisers, etc. The lumbering and woodworking industries have become familiar with this excellent line of machine and many visitors took a keen interest in the exhibit.

A. R. Clarke & Company, Limited, Toronto, tanners and manufacturers of lumbermen's and sportmen's clothing, had a most attractive exhibit of gloves, mitts, mocassins, mackinaw clothing, etc., in the Manufacturers Building. This large and progressive firm manufacture from the hide to the finished product and the "A. R. C." lines are known from coast to coast.

The Dominion Belting Company, Limited, Hamilton, Ont., were again to be found in Machinery Hall with a full line of their "Maple Leaf" Cotton Duck Belting, in a number of sizes and thicknesses. This company's products can be found in hundreds of mills throughout the country. Mr. John Scott had charge of the exhibit.

Beal Bros., Limited, Toronto, tanners and manufacturers, were again to be found in the Manufacturers Annex, showing a full line of their "Round Knife" brand harness, horse collars, blankets, rugs, oil tan moccasins and sporting boots, which are so well known to the lumber trade of Canada.

The Bishopric Wall Board Company, Limited, Ottawa, exhibited their lath and stucco boards for interior and exterior use, by means of a very attractive bungalow built wholly of their products. This exhibit created much interest.

Gutta Percha & Rubber Limited, Toronto, displayed a splendid line of belting, packing and hose. "P. M. S.," "Special Drive" and "Lion" are brands of belting manufactured by this firm, that are well known throughout the Canadian lumber field as well as their "Redstone" High Pressure Sheet packing.

J. J. Turner & Sons, Peterborough, Ont., exhibited several tents of special interest to lumbermen and contractors. One of these was their "Twenty-four Horse Tent," 28 x 42 feet, made of standard weatherproof duck. All the latest constructional features are embodied in the tent, particularly in the roping, it being reinforced at all poles. This tent is specially suitable for contractors' use, and is similar to the hundreds used throughout the West by leading contractors. Another tent shown was the Prospector's Special Tent, made of treated balloon silk, 7 x 9 feet, and weighing only 12 lbs. Mr. Reg. H. Turner was in charge of the exhibit.

W. S. Mahaffy Company, Toronto, manufacturers of trucks, showed a very fine display in the Manufacturers Annex. A number of new models were on exhibit which created a lot of interest. The Mahaffy Company specialize in trucks of all kinds.

The Autographic Register Company of Canada, Limited, had an attractive exhibit which included their "Shouperior" Manifolder, a practical and useful device for relieving office managers of the extensive detail work in connection with the keeping of accounts. The "Shouperior" is especially adapted to the retail lumber business.

The James Morrison Brass Mfg. Company, Limited, Toronto, had an exhibit of special interest to the lumber trade. Besides their well-known lines of steam specialties, a prominent position was reserved for the Morrison Lumber Measuring Register, which is now in use in so many mills throughout the country. The installation of the Register on the matcher, planer, moulder, resaw or sorting table increases the efficiency of the mill and reduces the handling costs of lumber to a minimum. It can be used for measuring lineal feet and board measure as desired. A machine will be sent on trial to any reputable firm.

Wm. Cooper & Nephews, manufacturers of Cooper's Fluid Dip, a disinfectant and germicide, and Bitter Lick Medicated Salt Brick, the great conditioner, tonic digester, and worm destroyer, had a tent near the live stock buildings, and came in for much attention. A guessing contest, in which valuable prizes were given, and other souvenirs kept the name of "Cooper's Fluid" prominently before the whole Fair. Cooper's Fluid was the special disinfectant used for the Exhibition grounds and buildings. McCrimmon & Son, the Canadian managers, were in charge of the exhibit.

The Lintz-Porter Company, Toronto, showed, among other things, very interesting and instructive samples of their telephone systems, time recording instruments, watchman's clocks, annunciators and fire alarm systems. Of special interest was their display of time recording equipment, including master clocks, time stamps, secondary clocks, cost keeping recorders for showing the time occupied on a job, and time recorders for marking the time of arrival and departure of employees. By means of this system time recorders are handled with extreme simplicity and efficiency. The secondary clocks for different departments of buildings are controlled from one master clock. This system is complete and flexible enough to meet the working conditions in any plant. It includes a complete range of apparatus that adapts itself to various lines of business without friction and with accuracy. The watchman's clocks which were also exhibited are already well known to lumbermen, being of great value in connection with the efficient carrying out of a watchman's duties.

The Preston Woodworking Machinery Company, Limited, Preston, Ont., showed a fine assortment of their various machines. Their exhibit included a 12-in. four-side moulder, one of the most up-to-date moulders now on the market. This machine has an exceptionally heavy base, a strong and heavy frame, a long heavy bed securely gibbed to the frame, and many other features of special interest, including seven changes of feed which are regularly supplied by means of change gears and compound pulley—18 ft., 27 ft., 37 ft., 40 ft., 45 ft., 56 ft. and 68 ft. per minute and, if desired, as fast as 81 ft. per minute. Among the other machines which this company showed were their No. 162, High Speed "Hess-Bright" Ball Bearing Shaper, which they assert to be the first ball bearing shaper made in Canada; their No. 129 Power Feed Rip Saw with variable feed; their No. 132-36-in. Band Saw and their No. 121 Pony Planer. It is interesting to note that the Preston Woodworking Machinery Company, Limited, furnished no less than 34 machines for the equipment of the new Toronto Technical School.

Cowan & Company of Galt, Limited, Galt, Ont., exhibited several interesting machines, among them being their chain saw mortiser M256. This machine was built for shops where all kinds of light work may be called for and where speed is of much importance. They also exhibited their power feed ripsaw, M280, with variable feed. This machine is simple, strong, compact and accessible and has variable feed from 0 to 210 feet per minute. The feed is also reversible. Their heavy pattern 6 in. moulder M282 was also on exhibition. This machine has patent compensating gear drive, patent guide post clamp and improved end thrust.

The Cling-Surface Company, Buffalo, N. Y., had an interesting demonstration of slack pulleys running with Cling-Surface treatment and tight pulleys running without it, showing that the Cling-Surface pulley delivered 50 per cent. greater load than the other. The running of a belt slack, thus treated, relieves the bearings of all tightening strain, does away with belt losses and gives an increased output because of the entire absence of slipping. Mr. I. B. Faatz, who has represented the company throughout Canada for a number of years, was again in charge of their exhibit.

Pratt & Whitney, Dundas, Ont., whose standard lines include taps, dies, drills and reamers, devoted their exhibit this year to an interesting line of shell tools, having been running their plant night and day for some time on these lines.

The Dodge Manufacturing Company, Limited, Toronto, showed an interesting line of their wooden pulleys. They also distributed an interesting booklet entitled "A Scientific Test," illustrating very clearly the advantages secured by the use of wooden pulleys in all cases where such pulleys can be used. The company will be glad to hear from parties interested in wooden pulleys and will send them

copies of this booklet, showing the results of tests made at the University of Toronto.

C. Walter Green Company, Peterboro, Ont., showed an interesting line of shingle and lath mill machinery, including a lath bolter for cutting lath bolts out of round material. These machines were shown in actual operation.

The Tallman Brass & Metal Company, Hamilton, Ont., had an interesting exhibit showing all the different brands of babbitt metals which they manufacture, including their well-known brands of Arctic metal.

An attractive booklet entitled "Wisdom Teeth" has been published by the Berlin Machine Works, Beloit, Wis., U.S.A., whose Canadian plant and offices are at Hamilton, Ont. The booklet opens with a breezy story regarding the general manager of a certain sawmill, who worried himself almost ill over the vast amount of valuable timber which he saw going up in smoke in the burner each year. Finally, on the advice of a progressive friend, he replaced his thick-gauge circular saws with band saws, making a wonderful saving in kerf and improvement in the quality of his product. Moreover, there was an important saving in operating expenses. The booklet contains also many splendid illustrations and descriptions of most of the important Berlin products.

According to a Vancouver correspondent, lumber firms in British Columbia have secured orders for 30 million feet for the Allied Governments.

Tool Handles Used in Great Britain

From time to time numerous inquiries for wooden tool handles have been despatched to the Department of Trade and Commerce, Ottawa, from England. In order to illustrate as fully as possible the kinds of handles chiefly in demand, the following drawings have been prepared. As far as investigation in the past shows, the main obstacle confronting Canadian manufacturers was their inability to produce at competitive prices. In ante bellum days it was practically impossible to complete with European manufacturers; but conditions are so changed at present, and will undoubtedly change still more after the war, that Canadian manufacturers should make a special study of the British market ad interim. With the exception of hickory, Canada has large tracts of timber suitable for the purpose, and with the installation of the latest machinery, a market worth millions of dollars annually should be at the disposal of manufacturers. The cost of labour has also been advanced, and legitimately so, against the ability of Canada to compete. It is not to be forgotten, however, that labour will not, at least for many years, be as cheap in Europe as it was prior to the war. The reasons for this statement are quite apparent to any student of the labour market at the present time, as well as its probable condition after a war that will deplete the labour ranks and augment the cost of living. It may be contended that these two factors will also be registered in the economic life of Canada, and might therefore eliminate any possible advantage in the cost of production. It seems fairly obvious, however, that such contention would be only partly true as the greater proportion of such advances will in all probability be recorded in Europe.

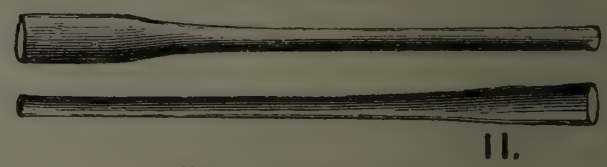
Straight Eye Trees

No. 1.—2 ft. 6 in. or 2 ft. 8 in.

Bent Crutch Trees
(With Turned Socket)

No. 6.—2 ft. 2 in. or 2 ft. 4 in.

Pick Shafts
(Open or Solid Eye)

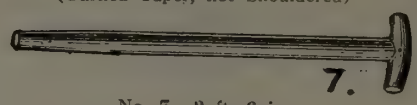


No. 11.—3 ft. 0 in. best ash
No. 11.—3 ft. 3 in. best ash
No. 11.—3 ft. 6 in. best ash

Bent Eye Trees

No. 2.—2 ft. 6 in. or 2 ft. 8 in.

Straight Crutch Trees
(Turned Taper, not Shouldered)

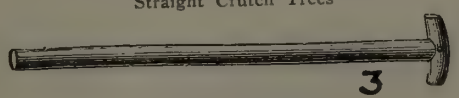


No. 7.—2 ft. 6 in.

Hand Hammer Stails
(Best Ash)

No. 12.—12 in., 13 in., 14 in., 15 in., 16 in., 17 in., 18 in., 19 in., 20 in., 21 in., 22 in., 24 in.

Straight Crutch Trees

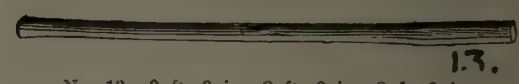


No. 3.—2 ft. 4 in.
No. 3.—2 ft. 6 in.

Bent Crutch Trees
(Turned Taper, not Shouldered)

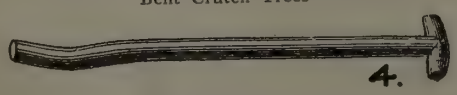
No. 8.—2 ft. 6 in.

Sledge Hammer Stails
(Best Ash)



No. 13.—2 ft. 3 in., 2 ft. 6 in., 2 ft. 9 in., 3 ft. 0 in., 3 ft. 2 in., 3 ft. 3 in., 3 ft. 4 in., 3 ft. 6 in.

Bent Crutch Trees

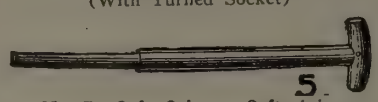


No. 4.—2 ft. 4 in.
No. 4.—2 ft. 8 in.

Manure Fork Trees
(Single Bend)

No. 9.—3 ft. 9 in. length.
1 in. diameter

Straight Crutch Trees
(With Turned Socket)

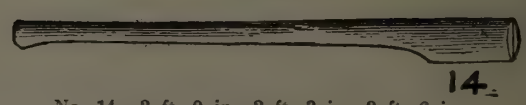


No. 5.—2 ft. 2 in. or 2 ft. 4 in.

Manure Fork Trees
(Double Bend)

No. 10.—3 ft. 6 in. length.
1½ in. diameter.

Axe Handles
(Best Ash)



No. 14.—2 ft. 0 in., 2 ft. 3 in., 2 ft. 6 in., 2 ft. 9 in., 3 ft. 0 in., 3 ft. 6 in.

The Wooden Pole Market in England

A Possible Opening For Canadian Poles—Specifications, Prices and Other Details Required.

Mr. H. R. MacMillan, special Trade Commissioner who is on a trip to Great Britain and many European, South African, Australian and other eastern points to investigate the possibilities of increasing the Canadian export trade in wood goods, reports from London, England, under recent date in connection with the market for wooden poles as follows:—

The market for wooden poles in Great Britain is confined chiefly to the requirements of the Government, which owns and maintains the telephone and telegraph system, and to the requirements of the railroad companies. Steel poles form the chief source of supply for tramways, power and lighting purposes.

The requirements of the Imperial Post Office Department for telephones and telegraphs have been about 90,000 poles per year. The requirements will henceforward be about 50,000 per year, the purchases being decreased as the more important construction programmes are completed.

The annual purchases by the railway companies are small and are governed by the same specifications and conditions as apply to the purchases by the Post Office Department.

The requirements for the Post Office Department are purchased by the controller of stores for the department, who issues specifications and tender forms in July for the following calendar year's requirements.

The sizes required are given in the following table:—

Sizes of Light Poles.				Sizes of Medium Poles.				Sizes of Stout Poles.			
Length.	Diameter at top. Minimum.	Diameter at top. Maximum.	Minimum diameter at 5 ft. from butt end.	Length.	Diameter at top. Minimum.	Diameter at top. Maximum.	Minimum diameter at 5 ft. from butt end.	Length.	Diameter at top. Minimum.	Diameter at top. Maximum.	Minimum diameter at 5 ft. from butt end.
Ft.	In.	In.	In.	Ft.	In.	In.	In.	Ft.	In.	In.	In.
16	5	5⅜	6	—	—	—	—	—	—	—	—
18	5	5¾	6	18	5½	6½	7½	18	—	—	—
20	5	5¾	6	20	5⅝	6¾	7⅝	20	—	—	—
22	5	5¾	6½	22	5⅝	6¾	7⅞	22	—	—	—
24	5	5¾	6½	24	5⅝	6¾	8	24	—	—	—
26	5	6	6¾	26	5¾	7	8⅛	26	7½	9	10½
28	5	6	7	28	5¾	7	8⅛	28	7½	9½	10½
30	5	6	7½	30	6	7½	8¾	30	7½	9¾	10¾
32	5	6½	7½	32	6	7½	9	32	7½	9¾	11
34	5	6½	7½	34	6	7½	9⅛	34	7½	9¾	11½
36	5	6½	7¾	36	6	7½	9⅛	36	7½	9¾	11½
40	5	6½	8	40	6	7½	9¾	40	7½	9¾	12
45	5½	6¾	8¾	45	6½	8	10¼	45	7½	10	13
50	5½	7	9½	50	6½	8½	11½	50	7½	10½	13¾
55	5½	7½	10¼	55	7	8¾	12½	55	8	10½	14¾
60	5½	7¾	11	60	7	8¾	13¼	60	8	10½	15½
65	6	8	12	65	7	9	14	65	8	10½	16¼
70	6½	8½	13	70	7	9½	14¾	70	8	10½	17
75	6½	8½	13½	75	7	9½	15½	75	8	10½	17¾
80	—	—	—	80	7	9½	16¼	70	8	10½	18¾
85	—	—	—	85	7	9¾	17½	85	8	10½	20

The sizes in which over 1,000 poles annually are required and the quantities purchased in such sizes for 1915 are shown herewith:—

Light		Medium		Stout	
22 ft.	4,100	26 ft.	1,200	32 ft.	8,000
24 ft.	16,500	28 ft.	10,700	34 ft.	10,000
26 ft.	12,500	30 ft.	1,250	36 ft.	10,500
28 ft.	4,400	34 ft.	1,400	40 ft.	3,500
				45 ft.	3,200
				50 ft.	1,100

Only a few hundred poles of the remaining sizes are annually purchased.

The Requirements of the Specifications

The specifications require that all poles be Russian or Scandinavian red pine, a wood similar to Canadian red pine. The grading is very strict, admitting only perfectly straight piles, close grained, free from large or dead knots, cut during the winter preceding delivery, and perfectly free from rot. The pole must be barked, and the butt cut off square.

The person tendering must tender for the whole annual requirement or for a fixed proportion of each size. All quotations submitted must be c.i.f. quotations to one or all of the fifteen ports at which poles are received, and must include the cost of placing the poles on the wharf of the creosoter or on railway trucks.

The vendor must agree to the inspection of the poles after they are delivered to the designated landing points and agree to the rejection of all poles thrown out by the inspector. In case of a dispute as to rejected poles, the Post Office Department provides for arbitration.

Payment is made in full for poles accepted twenty-one days after acceptance.

All Swedish poles are stored for six months after arrival, at a cost of 18 cents each, in order that they may season for creosoting. All poles are creosoted by pressure process before being used. It is estimated that a creosoted pole will give a life of fifty years.

Cost of Poles

The cost in normal times for three of the most important poles used is given below:—

	24 ft. Light	28 ft. Medium	36 ft. Stout
Cost, f.o.b. Sweden	$1.26	$1.75	$6.71
Cost, c.i.f. creosoting works	1.48	2.62	7.66
Storage	18	18	18
Cost to creosote	54	96	2.44
Cost ready for use	2.20	3.76	10.28

The Post Office officials are well satisfied with the excellent straight poles which they receive from Sweden and Russia. Yielding to local pressure they have this year broadened the specification to include British-grown Scotch pine and European larch, both of which are creosoted before being used.

Opening for Canadian Poles

As the European wood is expected to be somewhat higher in price for a few years, the Controller of Post Office Stores is inclined to consider tenders for Canadian poles provided that:—

1. He is convinced that the strength of Canadian timber is sufficient to support the heavy lines in use.

2. That the cost per year's service is not greater for the Canadian timber than for European timber. Samples of cedar poles have been secured from British Columbia during the past few months, and will be tested for strength and given a trial. The Canadian species, which would be admissible if the prices were not too high are white cedar, red cedar, and tamarack. The latter would undoubtedly be creosoted and the cost of creosoting would necessary be borne in mind when considering the cost of tendering. If the Departmental engineers are favourably impressed with the samples of the cedar poles, which they now have before them, and with the data on the durability of the wood, which has been supplied, they may be inclined to consider tenders on the basis of using it without creosoting.

The supply of poles from Canada during the present period of high freight rates is out of the question. What opportunities there are will be best developed when freight rates are normal. At that time it would appear that Eastern Canada would be the most favourable point from which to ship.

Quotations to be Submitted Through Pole Dealers

The Controller of the Post Office Department will accept tenders direct from the shipper provided that the shipper undertakes the responsibility of delivering the poles to the yards or trucks as required. This consideration, together with the necessity of being in a position to dispose of such poles as may be rejected has practically forced the Scandinavian shippers to submit their quotations through the various pole dealers and creosoters, who make a specialty of the business, and it would appear advisable for Canadian shippers to take up the business through the same channels. The pole dealer handles the business for 2½ to 4 per cent. commission on the f.a.s. value.

List of Pole Merchants

A list of the more important pole merchants is in the hands of the Commissioner of Commerce, Ottawa. (Refer to File No. A 1764.) The shipper dealing through the established merchants has an opportunity of tendering for the requirements of the Post Office Telephones and Telegraphs.

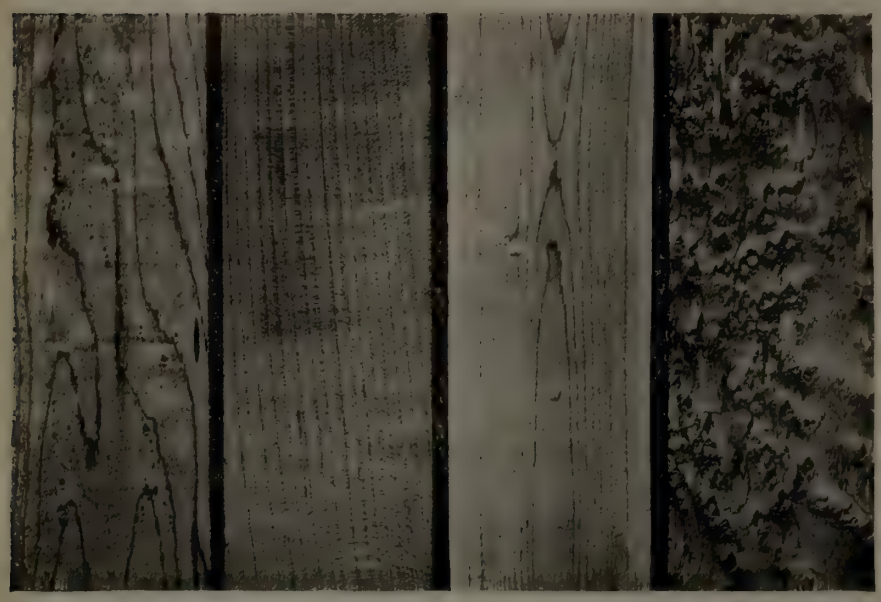
New Ontario Possibilities Illustrated

The New Ontario Colonization Company Ltd., of Jacksonboro, Ont., and Buffalo, N. Y., whose interesting lumbering and colonization operations have been fully described in previous issues of the Canada Lumberman have published an interesting map of the townships of Kendrey and Haggart in which their colonization efforts are centred. A general map is shown, giving a clear idea of the location of Jacksonboro almost at the geographical centre. Surrounding the map, the company have published a number of attractive photographs of their sawmill plant, office, etc., also views of farming operations in the district. Much interesting information is also included in the margins of the map. Parties interested in securing valuable home sites in Ontario's clay belt will do well to communicate with this company.

Commercial Importance of Maple

Technical Properties and Practical Uses of the Different Varieties of Canadian Maples

By A. H. D. Ross



1. 2. 3. 4.

1.—Slash grain sugar maple.
2.—Edge grain sugar mape.
3.—Broad-leaved maple.
4.—Bird's eye maple.

Scientists distinguish no less than 70 species of maple, confined to the middle and northern portions of the temperate zone and ranging from sea-level to a height of 6,000 feet. They all belong to the single genus Acer, whose fruit is a double samara or "key" formed by the growing together of two seeds, each of which is provided with a thin sail-like extension. At maturity the "keys" break up and the wings assist in the distribution of the seeds. In some species of maple the samaras ripen and fall in the spring but in others they do not fall until late summer or the fall, whilst in a few they remain on the trees all winter and germinate in the spring. Another peculiarity of the maples (excepting ash-leaved maple) is their oppositely placed, long-stalked and palmately-lobbed leaves.

In the United States there are 13 species of maple, 4 of which are confined to the Pacific Coast region; whilst in Canada there are only 9 maples, and three of these are confined to British Columbia. Of the Canadian maples, five are fair-sized trees but the other four are more or less shrub-like and of little commercial value.

Sugar Maple (Acer saccharum) is the most important of our maples, and is also known under the names of Hard Maple, Rock Maple, Black Maple and Sugar-tree. This is one of the finest of all the American forest trees and has a very wide range of distribution in eastern North America—being found in pure stands or mixed with other hardwoods or conifers from southern Newfoundland westward in a line running north of Lake Saint John and Lake Timiskaming to the Lake of the Woods, Nebraska and Kansas; southward to northern Florida and eastern Texas. It is a tree of medium to low altitudes, prefers cool moist climates and does best on fresh well-drained soils—the growth on poor sandy or gravelly soils being very slow. Studies of 261 trees in Michigan and 548 trees in New York show that five inch trees (4½ feet from ground) were grown in 61 and 68 years, respectively; ten inch trees in 109 and 122 years; and fifteen inch trees in 205 and 202 years. In Ontario the growth is certainly not any faster than in Michigan and New York, so it is a fair enough question to ask "How many 15-inch sugar maple trees will there be in Ontario in the year of grace 2115?

The sapwood of sugar maple is usually 30 to 40 rings in width and of a light-yellowish color, whilst the heartwood varies in color from light reddish-brown to brownish-white. The wood seasons slowly and is liable to check but does not warp and twist, weighs 43 pounds per cubic foot when thoroughly kiln dry, is fine-textured, hard and strong and takes a fine polish. Specimens containing 56 per cent. moisture showed an endwise crushing strength of 4,000 pounds per square inch, a "modulus of rupture" (in cross-bending tests) of 8,820 and a "modulus of elasticity of 1,437,000; whilst a reduction of the moisture content to 12.6 per cent. raised these strength values to 7,370, 14,830 and 1,930,000, respectively. From these figures it appears that sugar maple is almost as strong as white oak and very much stronger than red and black oak. Under sudden shock it is said to be more liable to failure than oak; nevertheless it is used extensively for heavy wagon axles and the framework of vehicles and agricultural implements. The greatest quantities of hard maple are used for hardwood flooring, wood distillation and furniture, but there are also considerable quantities used for the construction of agricultural implements, pumps, split-wood pulleys, pulley sheaves, friction blocks, cars, sleighs, pianos, separators, washing machines, meat blocks, neck yokes, whiffletrees, rulers, rudders, toys, handles, spindles, bobbins, bicycle rims, skis, paddles, insulator pins, etc. As the supply of hard maple decreases, for these purposes, yellow birch and other woods will probably be substituted, as many of them do not call for the superior technical properties of hard maple. Both as a work-wood and as a fuel, hard maple is superior to beech, yellow birch and elm. In the New England States it is used extensively for the manufacture of shoe lasts, boot-trees, hat blocks, gear teeth, etc.

The sap of the sugar maple is collected and boiled down in shallow evaporating pans, for the manufacture of the maple syrup and maple sugar so well known to all Canadians. During the 60 years between 1851 and 1911 the average annual production of maple syrup and maple sugar rose from 10,000,000 pounds to 25,000,000 pounds and the aggregate amount produced was 1,110,000,000 pounds; which at an average selling price of ten cents per pound must have been worth approximately $110,000,000. During the year 1900 the production of maple sugar in 23 States amounted to 11,928,770 pounds; 80 per cent. of which was made in the three states of Vermont, New York and Pennsylvania. In addition to this there were 2,056,611 gallons of maple syrup manufactured—all of which goes to show the importance of the maple sugar and maple syrup industry.

Red Maple (Acer rubrum) is also known as Swamp Maple, Soft Maple, White Maple and Shoe-peg Maple. Usually it is confined to the borders of streams and swamps but is occasionally found on hillsides. It is generally associated with other hardwoods and its range extends from southern Newfoundland to the head of Lake Superior and southward to eastern Texas. It is a much more rapid grower but shorter-lived tree than sugar maple, a study of 25 trees in New York State showing a growth of 5 inches in diameter in 34 years and of 8 inches in 60 years. When mature the trees attain a height of 70 or 80 feet and a diameter of 2 or 3 feet—in the river swamps of the lower Ohio River, 100 feet and 3 or 4 feet. The red, scarlet or rarely yellow flowers of this tree appear before the leaves and the large winged seeds ripen in early summer; whilst the broadly oval, usually 5-lobed, coarsely-toothed leaves turn a beautiful red or scarlet color in autumn.

The sapwood is usually thick and brownish-white, the heartwood light brown often tinged with red, weight 39 pounds per cubic foot, fine-textured, fairly hard and elastic and takes a good polish. Wood containing 69 per cent. moisture showed an endwise crushing strength of 3,680 pounds per square inch, a cross-bending modulus of rupture of 8,310 and a modulus of elasticity of 1,443,000; whilst a reduction of the moisture content to 12.1 per cent. raised these strength values to 6,610; 13,420 and 1,761,000, respectively. The principal uses of this wood are for flooring, furniture, matress frames, pulleys, handles and other turned work, shoe pegs, brush-blocks, flasks, boxes, crates, fuel wood, chemical wood, etc. In very old trees the wood of red maple frequently displays the "curly grain" of silver maple (Acer saccharinum), and is prized for rifle and gun stocks, but it is only rarely that it shows the "bird's eye" pattern of sugar maple. A study of the minute structure of the wood shows that the growth rings are often indistinct; that the medullary rays are low and inconspicuous; and that "pith flecks" are very common—often abundant. The sap of red maple is sometimes used for the manufacture of maple syrup and the boiling of its dusky red inner bark with a solution of sulphate of iron produces an intensely black dye.

Silver Maple (Acer saccharinum) is also known as Silver-leaved Maple, White Maple, Broad-fruited Maple, River Maple and Soft Maple. This tree is best suited to deep, porous alluvial soils, requires considerable moisture and humidity and is not adapted to vigorous climates. Like the sugar maple, it is confined to low or medium altitudes and its range extends from southern New Brunswick westward to southern Ontario and the Dakotas, and southward to Florida and Arkansas. It is a rapid but not a persistent grower and is frequently used for street planting. A study of 11 trees in eastern Nebraska shows that 6-inch trees were grown in 19 years and 9-inch trees in 40 years. The long, spreading and drooping branches of this tree readily distinguish it from other maples, and on old stems the

bark separates into long thin flakes free at the ends; whilst the leaves are nearly white and silvery below.

The sapwood is thick and of a creamy-white color, the heartwood of a pale brown color, weight 33 pounds per cubic foot, fine-textured, brittle, easily worked and takes a fine polish. Tests show that wood containing 66 per cent. moisture exhibited an endwise crushing strength of 2,490 pounds per square inch, a cross-bending modulus of rupture of 5,820 and a modulus of elasticity of 943,000; whilst a reduction of the moisture content to 12 per cent. of dry weight raised these values to 6,820; 14,400 and 1,570,000, respectively. The most serious drawback of the wood is its brittleness, but there is not much of it cut for lumber and it is suitable for the manufacture of gun stocks, woodenware and furniture. It is also useful as a fuel—especially as a light fuel for baking, etc.—and like most maples, is rather perishable in contact with the soil.

Broad-leaved Maple (Acer macrophyllum) is also known as Bigleaf Maple, Oregon Maple and White Maple, and derives its name from the circumstance that its deeply 5-lobed leaves are from 8 to 12 inches across. Its range of growth extends from the coast of Alaska southward along the islands and coast of British Columbia, western Washington and Oregon to California and it seldom ascends more than 2,000 feet above sea-level. It is the only large maple of the Pacific region and is confined mainly to rich river bottoms and the mountain slopes of mountain valleys. Twelve inch trees were found to be 50 years old; 20-inch trees 85 years; and large trees are probably 150 to 200 years old. Under favourable conditions the trees attain a height of 80 to 100 feet and a diameter of 2 to 3 feet. The heartwood is of a light brown color with a pale tint of red, weighs 31 pounds per cubic foot, is fine-textured, rather strong and hard and is used mainly for the manufacture of furniture and as a substitute for red and silver maple; also for snow-shoe frames, broom handles, axe handles, etc. The curly-grained variety is known as "fiddle-back maple" because of its resemblance to a variety of sycamore used for this purpose.

Maple Lumber

Practically all the maple lumber used in Canada is obtained from sugar maple and red maple. In Ontario alone the annual consumption is approximately 750,000,000 board feet, 15 per cent. of which is purchased outside Ontario; mostly from the United States. In 28 industries in Ontario maple lumber is used in large quantities and in six of them it heads the list of woods used.

For the whole Dominion, the returns for 1913 show the following cut of maple lumber by Provinces.

Province	Active Mills Reporting	Cut in Board Feet	Percentage of Total Cut	Average Price per M
Ontario	433	61,213,000	83.2	$18.09
Quebec	234	7,364,000	10.0	17.52
Nova Scotia	70	2,946,000	4.0	12.70
New Brunswick	33	1,945,000	2.7	14.23
P. E. Island	19	86,000	0.1	16.60
British Columbia	2	26,000		10.77
Total Mills	791	Cutting 73,580,000 board feet of maple lumber.		

Approximately 36 per cent. of all the maple lumber goes into hardwood flooring, 15 per cent. into furniture, 10 per cent. into interior finishing, 5 per cent. into agricultural machinery, 2 per cent. into musical instruments, and the remaining 32 per cent. is used for a great variety of purposes.

Ash-leaved Maple (Acer negundo) is also known as Cut-leaved Maple, Manitoba Maple, Box Elder and Stinking Ash. This is the only one of our maples which has compound leaves, and their fancied resemblance to those of an ash has given the tree its name. The fruit, however, is a double samara, which unmistakably declares the tree to be a true maple. Its range of growth extends from western Vermont and central New York to the Lake of the Woods and westward to the eastern slopes of the Rockies; southward to Florida and Arizona. It accommodates itself to a wide range of soils but is rather intolerant of shade. Its crooked stems and branching habit render it useless for lumber, but it is useful for planting on the prairies for windbreaks and as a fuel. During the spring of 1907 the writer assisted in the shipment of something like 1,200,000 of these trees from the Dominion Forestry Nursery Station at Indian Head, Saskatchewan, to settlers in Manitoba, Saskatchewan and Alberta and the reports of the Inspectors show that fully 95 per cent. of the trees sent out are growing. Its rapid growth makes it an excellent tree for the establishment of shelter belts around orchards and buildings and it is also useful as a "nurse tree" for more valuable species like green ash and white elm—both of which do well on the prairie.

The wood of the ash-leaved maple is nearly always of a creamy-white color (occasionally yellowish), sapwood thick and nearly indistinguishable, weighs 27 pounds per cubic foot, fine-textured, soft, weak and perishable.

Striped Maple (Acer pennsylvania) is also known as Northern Maple, Goose-foot Maple, Moosewood, Whistlewood, and Striped Dogwood. It has the habit of a shrub or small tree and seldom attains a height of more than 20 or 30 feet and a diameter of more than 5 or 10 inches. Usually it is found in the shade of other trees and its range of growth extends from Nova Scotia westward along the Valley of the St. Lawrence and the shores of the Great Lakes to northern Minnesota and southward to Georgia. The reddish-brown or dark green bark of the stems is conspicuously streaked with narrow white lines but the wood is of no economic importance.

Vine Maple (Acer circinatum), or Mountain Maple is a very slow but persistent grower with the peculiar habit of often growing in a vine-like or prostrate position and ranges from the lower valley of the Fraser River, in British Columbia, to Vancouver Island and southward to central California. Usually it is confined to the banks of streams but in Washington and Oregon I have seen it up to a height of 3,200 feet above the sea. The heartwood is very pale brown to almost white, weighs 44 pounds per cubic foot, fine textured, hard and fairly strong but checks badly in drying. It is used occasionally for fuel, axe handles, etc.

Dwarf Maple (Acer glabrum) is also known as Smooth Maple, Shrub Maple, Bark Maple and Mountain Maple. Its range is from southeastern Alaska to central California; eastward in British Columbia to the Bow River Valley and to the South Kootenay district and on the eastern slopes of the Rockies in New Mexico. It is generally a small-stemmed shrub 4 to 6 feet high, or a slender tree 10 to 12 feet high; rarely 20 to 30 feet, and 6 to 12 inches in diameter. It attains its largest size on the coast of Vancouver Island and in the Blue Mountains of Oregon. The heartwood is light brown or almost white, weighs 33 pounds per cubic foot, is fine-textured and hard but too small to be of any commercial value.

Mountain Maple (Acer spicatum) is also known as Dwarf Maple, Water Maple and Moose Maple. Usually it is a large shrub, but under favourable conditions it becomes a tree 25 or 30 feet high and 6 or 8 inches in diameter. It is very common in the shade of other trees on moist rocky hillsides from Newfoundland westward to southeastern Saskatchewan, and southward through eastern Minnesota, Wisconsin and Ohio to Pennsylvania and along the Alleghanies to Georgia. The flowers are yellowish-green; the fruit red and in drooping clusters; the leaves quite thin, coarsely-toothed and sparingly hairy below. The wood is of no commercial value.

Little Cedar Journeys

The Timberman in its issue for August publishes the following interesting paragraph under the title of "Little Ceder Journeys:"—"Some trade practices are freakish. One of the greatest incongruities is noticeable in the red cedar bevel siding business in British Columbia. In some instances the British Columbia logs are exported to the American side, upon which an export duty is levied. The logs are then converted into strips and re-exported into British Columbia, upon which a war tax of 7½ per cent. is imposed. The strips are then manufactured into siding and re-imported into the United States. Everybody seems to be happy. British Columbia cedar logs are imported into Washington, converted into shingles and sold to the American trade. It would be a good joke all round if the American-made shingles did trek across the border and supply Canadian wants. This actually happened, and to make the case more amusing, the shingles were branded with the British Columbia mark. The British Columbia government got on to this little joke and stopped it."

Thos. R. Hilyard, the last survivor of the old lumbering and shipbuilding firm of Hilyard Bros., of St. John, N. B., died recently at the age of 73 years. Mr. Hilyard was born at St. John and was associated with lumber and shipbuilding all his life. When the days of wooden ships, in which St. John was the fourth among the shipowning ports of the British Empire passed away, and the iron and steel ships came into use, the firm of Hilyard Bros. continued the lumbering end of their business. Mr. Hilyard is survived by his widow and one daughter.

A despatch from Vancouver states that Sir Robert Borden, Premier of Canada, who has recently been in England, has made arrangements for a fleet of ships to carry lumber from British Columbia to Great Britain, Europe and Australia.

Philip Borolzheimer, treasurer of the Eagle Pencil Company, New York and London is on a business trip to the Pacific Coast where he has been looking into the cedar supply for pencil making. It is stated that the yellow cedar of British Columbia corresponds to the kind required. If preliminary investigations gives encouraging results, experts will follow to enquire into the possibilities in detail.

Recent reports received from points along tht valley of the Fraser River in British Columbia stated that a very dangerous situation had developed in connection with bush fires in Surrey, Langley and Matsqui municipalities and that only a plentiful rainfall would save the situation. Much valuable timber was in danger and a good deal of damage had already been done.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Empioyment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted-Lumber

Quotations on two car loads 1-in. mill run Cedar delivered at Gravenhurst.

DITCHBURN,
18-19 Box D, Gravenhurst, Ont.

Basswood Wanted

No. 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Shingles, Posts, etc.

Wanted, stocks of lumber, shingles, ties, posts and timber. W. H. Thornton, 646 Dundas St., London, Canada. 17-17

Wanted

To buy, some No. 1 Cedar Ties. Apply Box 242, Canada Lumberman, 347 Adelaide Street West, Toronto. 17-20

Spruce Timber Tract

Wanted a large tract of Spruce timber, must have good location for sawmill or would enter into contract for the delivery of not less than four million feet of logs a year to a point on a railroad where I could locate my band mill. Box 247, Canada Lumberman, Toronto. 18-19

Wanted

6/4 No. 2 Common and Better Birch or Soft Elm in 9 in. and 10 in. Widths.

FIRSTBROOK BROS., Ltd.,
18 Toronto, Ont.

For Sale-Lumber

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

About 1,000,000 feet if Hemlock, cut August 1914, well manufactured and carefully taken care of. Write for sizes and price to The Wm. Cane & Sons Co. Limited, Newmarket, Canada. 17-20

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

Wanted-Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

POSITION WANTED—Log culler wants position. Ontario and Quebec license. Ten years experience. Best of references. Box 378, Canada Lumberman, Montreal. 18

Position wanted as Log Culler. Licensed for Quebec. Twelve years experience. Sober and honest. Can furnish good references. Box 245, Canada Lumberman, Toronto. 18

Portable House Expert. Practical man, experienced in designing and manufacturing portable houses is open to take charge, or organize. This is the best wood-working line to-day, and there are big orders in view, besides regular profitable business. Address, American, Box 243, Canada Lumberman, Toronto. 17-18

"Jim the Penman" The Fastest and Most Accurate Expert Timekeeper and Woods Acc't.

Fresh from largest machine skidding job in N. C. Also 10 years' experience in Northern Camps. A1 references. Handle time, technical logging costs, pay roll, etc. Sober. Married. Prefer large corporation. Answer to home.

JAMES L. HARVEY,
18-19 835 Hope St., Providence, R.I.

Wanted-Employees

Advertisements under this heading two cents a word per insertion. Minimum charge 50 cents.

Wanted

Good yard foreman for retail yard. State experience, salary expected, and references. Apply Box 246, Canada Lumberman, Toronto. 18

Wanted-Machinery

Wanted

One Second Hand Resaw, must be in first class condition. Will pay cash. The Field Lumber Company, Limited, Field, Ont. 18-19

Wanted

Patent Snow Plow, suitable for five-foot sleighs. Must be in reasonably good condition. State make, how long used and best cash price.
18-19 Box 392, Huntsville, Ont.

For Sale-Machinery

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.

1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3¼-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Business Chances

Wanted

Mill by contract. Hard or soft wood. Bank and efficiency references. Box 235, Canada Lumberman, Toronto. 16-19

Miscellaneous

Wanted

A second-hand Alligator, propeller driven, must be in good condition. Give full description with price and state where same could be delivered in case of purchase. Box 225. Canada Lumberman, Toronto. 15-18

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including.—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Working Mahogany

Once there was a sort of dread of tackling mahogany by the average workman, built upon the theory that it is about the hardest, heaviest and most difficult wood to work. Many workmen have since learned better than this, but for the benefit of those why may still be clinging to the old idea it is probably well to say here that really plain mahogany is about one of the easiest of the plain hardwoods to work and get satisfaction out of.

It does get a little hard and heavy in the course of a long time, after being treated with finish, and some species of it are rather hard when they first become thoroughly dry. Plain mahogany, however, is fairly easy to work, and when once dry does no more swelling and shrinking to amount to anything, and takes an excellent finish. It is not inclined to split and sliver, and is really easier to work on machines or with tools than hard, dry oak.

There are many different species of mahogany, and sometimes it blends so nearly into Spanish cedar that it is difficult to tell whether it is mahogany. This is the kind that is easiest to work, this having a plain, straight grain and texture resembling Spanish cedar. Then there comes a deeper red, the curly, burls and various figures, some of which have a great deal of cross grain, and some of which become hard after they are dry. Yet they are no harder to work than the same kind of figure or grain in oak or maple. Not so hard, in fact; and they are not so inclined to split or dig out.

One must, of course, exercise more care and take more time in working a piece of curly or figured mahogany than the plain stock, because of the cross grain, and because generally it is intended for a higher-grade finish. Take crotch mahogany, for example, and the figure in the crotches frequently presents practically an end wood for the face. That, of course, makes it a little hard to work, but think what it would be if we took oak or maple and presented the end wood this way for faces! It would be even harder than mahogany.

There are some other fancy woods from the tropical countries that are much harder and more difficult to work than mahogany. That is why mahogany has become so popular in the cabinet and mill work trade. There are three reasons for its popularity: One is its bright color and beautiful figure; one is the fact that when seasoned it is not affected by changing moisture conditions in the weather, since it does not swell and shrink; the other is its quality, figure and grain. Really it is about the easiest cabinet wood going to work.—The Woodworker.

White Cedar Has Long Life

The Herman H. Hettler Lumber Company, of Chicago, recently received from D. F. Daley, of the Menominee River Shingle Company, of Menominee, Mich., eight white cedar shingles that had seen service for thirty years. These shingles were bought by Mr. Daley, sr., from Latham & Smith, of Sturgeon Bay, Wis., at 50 cents a thousand. Mr. Daley also sent down a few of the old cut iron nails that had done service for thirty consecutive years and that could be used over if necessary for possibly another thirty years.

From the Reader's Point of View

The Export Trade with Australia

Editor Canada Lumberman:—

In regard to your enquiry as to the possibility of increasing the export of lumber to Australia from Canada, this is rather a difficult question to handle. Most of the trade, so far as lumber is concerned, is at present done through San Francisco, mainly owing to the fact that this city has quite a number of firms interested in the lumber business who have their local representatives in Australia. They are either represented straight out by their own offices in countries to which the timber is exported, or else by local timber agents; whereas, so far as the West Coast of Canada is concerned, there is an entire absence of speculative commission houses.

In our opinion the lumber business is more or less of a speculative nature. The mills sell f. o. b. and do not take the risk of freights, whilst few, if any, of the mills would quote c. i. f. The commission houses buy the Oregon f. o. b. and take the risk of freighting, time chartering the steamers and quoting c. i. f. and e. to foreign buyers, such quotations, of course, being far more satisfactory from the point of view of the buyer than would f. o. b. purchases be. Until the speculative commission houses come into the business, the bulk of the Vancouver trade will undoubtedly go to the United States, as it does at present, unless, of course, the British Columbia mills would quote c. i. f. and e. foreign ports, which we hardly think is likely.

As far as the Eastern side is concerned this differs materially from the west, and, in our opinion, the only means of furthering trade would be for the large mill owners to have their own agents in foreign ports. So far, there is an entire absence of these, and only one or two concerns do the business. Possibly the main reason for this is on account of the deals having to be seasoned prior to shipment to Australia, whereas they can be shipped right off the saw to Liverpool, etc.—Australian Importer.

Hemlock and Yellow Pine

Editor Canada Lumberman: Toronto, Sept. 4th.

Mr. Donogh's article relative to the price of hemlock will no doubt be read by many lumber dealers who will ask why he thinks that yellow pine competition is the main reason for the heavy decline. Since August 1914, when war was declared, there has been practically no cheap yellow pine imported that would in any way compete with hemlock; the special war tax of 7½ per cent. which became effective in February, 1915, completely blocking the little that was coming in up to that time. We have been offered hemlock dimension in quantities as low as $15.50 mill base, which would be Toronto delivery at $18.00. There never has been yellow pine dimension stock sold or offered at such a low price, so we fail to see where this higher priced lumber could possibly cause hemlock manufacturers to reduce their prices.

We think the real cause of the decline is lack of demand. Building in Toronto during the present year has fallen off over 75 per cent. If it were normal there would soon be a shortage in hemlock and a heavy advance in prices would follow. Our dealers then, as before, would be very glad to have short leaf yellow pine dimension stock at reasonable prices as a buffer against abnormally high prices for hemlock.

Mr. Donogh's fear that the use of yellow pine is likely to result in serious fires does not seem to us to be logical. The fire record in Canada is the highest in the world and we venture to say that not 5 per cent. of the lumber used in Canadian buildings is yellow pine, while, in the United States, particularly south of the Ohio River, fully 75 per cent. of the lumber used is yellow pine.—Frank H. Harris Lumber Co., Limited.

Such Stuff as Homes are Made of

In an article under the above title in a recent issue of the Craftsman the different materials of residence construction are intelligently and interestingly discussed, and the writer has the following to say of wood:

Turning now to wood, we find that although it does not share the extremely durable and fireproof virtues that characterize the materials just described, it is usually cheaper and possesses sufficiently adaptable and friendly qualities to give it a secure place in the architectural field.

The simplest form in which this material can be used is that of siding or clapboards, and although walls so covered are sometimes monotonous and uninteresting unless well relieved by window groups, verandahs and other features the cottage, farmhouse and stately home of colonial design lend themselves admirably to this construction.

Shingles, for both walls and roof, are always attractive, either when left to weather to a silvery gray or when stained some soft tone of reddish or golden brown or mossy green; but for a very large house shingles are likely to prove monotonous, unless combined with other materials. In California, redwood shakes, or extra large shingles, are employed for the walls of cottages and bungalows with remarkably pleasing result.

Needless to say wood construction is especially appropriate among woodland surroundings, and where a distinctly rustic type of architecture is desired logs or slabs may be used, although these are usually confined to summer homes.

As to the use of half-lumber, we can hardly do better than quote J. H. Elder-Duncan, who, in his delightful book of English "Country Cottages" says: "Half-timber work is one of the most abused methods of building now extant. The beautiful effects achieved by its use in former times can be seen in many counties, notably in Kent, Warwickshire and Worcestershire. But the beauty obtained by sound and honest workmanship is rarely seen nowadays. Half-timber should be a substantial framework, consisting of uprights tenoned into horizontal sills and heads, which in their turn are secured to substantial corner posts, the framework being strengthened by diagonal pieces. These diagonals were usually curved in the old work, and these curved pieces are best if they are so grown. The tenons should not run through the timbers, but be secured by wooden pins, the heads of which are left projecting. All the timbers should be left rough from the saw—they are better if only roughly squared—and are simply treated with boiled oil or thin tar. The joints should be made with a mixture of red and white lead, rendered workable with a small amount of boiled oil. In the old work the spaces between the timbers were filled with brick, usually set on edge and left plain, or covered with plaster.

"Modern half-timber, in nine cases out of ten, consists of thin slats of carefully planed timber nailed to the brick wall and provided with projecting pin-heads, the brick work showing between the slats being covered with rough-cast or plaster in imitation of the old work. The whole thing," adds this author emphatically, "is a disgusting sham for which no possible or valid excuse can be advanced."

St. Maurice Dam Contract Awarded

The St. Maurice Construction Company, an organization of Canadian contractors, has been awarded the contract for the construction of the great dam for the conservation of the waters of the St. Maurice River. This dam will have an important effect on numerous large industries deriving their power from the St. Maurice River, among them several of the greatest pulp and paper industries in Canada. Work upon the erection of the dam is to be commenced at the earliest possible moment. This work will be one of the greatest water conservation schemes in the world. The dam will hold back an amount of water twice as great as the amount stored by the enlarged Assan dam on the Nile, which, at present, forms the largest reservoir in existence. The site of the dam is at La Loutre, 40 miles east of Parent, the divisional point on the National Transcontinental Railway, 245 miles from Quebec City. The dam will be from 1,500 to 2,000 feet long, and have a maximum height of 80 feet above the foundation. When this dam is constructed, a minimum flow of 12,000 cubic feet per second will be obtained and the engineers expect to produce a minimum of 15,000 cubic feet per second.

The Quebec Government is now inviting tenders also, for building a huge storage dam on the St. Francis river at the outlet of Lake St. Francis. The St. Francis is one of the most important tributaries of the St. Lawrence and furnishes power for many important industries.

During the financial year 1914-15 the province of Quebec received $1,840,347 from lands and forests, the expenditure on the same account being $388,816.

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Review of Current Trade Conditions

Ontario

The same quiet trade conditions which have been the rule throughout the summer, continue in connection with lumber markets in Ontario. There is, however, a fairly general feeling that business in the small towns which depend upon the farmer for their trade, is certain to show a considerable improvement this fall, as the farmers have, on the whole, done remarkably well this year. In the larger cities the actual volume of trade is very small compared with former years, yet it is surprising how much stock is being steadily moved out of the yards. Much of this of course is going into small alterations and repairs, speculative building and the office and warehouse building business having continued almost stagnant. The trade in hemlock shows no change. The demand is very quiet. If the improvement which is looked for this fall materializes, hemlock is likely to be one of the first lines to benefit, as stocks have been systematically reduced for several months and manufacturers are not counting upon taking much out this winter. The hardwood trade also continues quiet. Prices are steady but firm, no particular line showing any special interest. The hardwood situation in the United States, which has a direct bearing upon the situation in Ontario, is difficult to sum up, but, a prominent wholesaler who recently made a very extensive trip throughout the Eastern and Southeastern States, reports having succeeded in picking up more business than he expected.

At Ottawa the local and export trades both are quiet. The local trade in particular is very dull. In connection with exports the shipping situation continues to be the ruling factor. Vessel room is so scarce and freight rates are so high that many prominent manufacturers have been allowing their stocks to accumulate, feeling certain that prices will either remain firm or advance and that there is nothing to be gained by trying to force their stocks upon the market at such high freight rates as those which now prevail. All the Ottawa mills have been working full time, in spite of the absence of extensive trade. Their chief object has been to give employment, so long as they could afford to do so.

Eastern Canada

There has been no change of any importance in trade at St. John during the past fortnight. The actual volume of business in progress is very small. Very few deals have been shipped. In fact the past month has been one of the poorest in the export trade this year. Freights continue very high and vessels are scarce. Laths and shingles continue unchanged. No contracts have yet been reported for next year's business. Operators are seriously considering the wisdom of making extensive reductions in their woods' operations during the coming winter.

The local market in Montreal continues very quiet. Building operations are still very light and show a continued tendency to decrease. There is a fair export trade however, to the United States, and, as the farmers of Quebec province have enjoyed a good harvest, it is reasonable to expect some improvement in the demand for lumber from country centres. In connection with the export trade to Great Britain, freight rates still continue very high, but it is possible that, on account of the activity of the Canadian and British Governments, the supply of vessels may soon be increased, and furnish relief.

The price situation in the eastern spruce market, as reported from Boston, is beginning to show improvement. A firmer tone is reported in connection with dimension stock. Few manufacturers will not quote lower than $23 base for new orders for frames. Random lumber is offering rather freely, current quotations being: 2 x 3, $19.50 to $20; 2 x 4, $20.50 to $21; 2 x 5, 2 x 6 and 2 x 7, $10.50 to $20; 2 x 8, $21.50 to $22.50; 2 x 10, $23 to $23.50; 2 x 12, $23.50 to $24. Spruce boards are quiet and offerings are heavy. For the very best spruce covering boards 5 in. and up wide, 8 ft. and up long, $20 is sometimes secured, but very fair boards of this grade are offering at $19 to $19.50. Hardwoods at Boston are quiet, although there is a fair volume of trade in progress and improvement is expected. Birch and maple are doing as well as any of the other hardwoods. Red birch 1sts and 2nds 1 in., are quoted at $52 to $54 and sap birch at $42 to $46. One inch maple 1sts and 2nds are bringing $38 to $41. Stocks of shingles at Boston are considerably reduced in retail yards and a better demand is expected. White cedar extras are bringing $3.20 to $3.40, clears $2.60 to $2.90 and 2nd clears $2.25 to $2.30. Red cedars are offered at a wide range of values, largely varying according to quality. Good brands of extras are bringing $3.50 and sometimes a little more, while fair makes can be had at $3.25. There is a good demand for lath and prices are firm. For 1⅝ in. the price ranges from $4.10 to $4.20 and for 1½ in. from $3.55 to $3.75.

United States

A gradual but slow improvement is reported from most parts of the United States in connection with the lumber industry. It is generally recognized that the excellent crop situation is to a great extent responsible for this improvement. The northern pine industry is in a fairly satisfactory condition and so is the hemlock industry of Michigan and Wisconsin. The improvement in northern pine however, has been better than that in connection with hemlock. Shipments are not so large as they were a year ago, but there is a fairly satisfactory movement by lake routes. Little change is reported in connection with hardwoods. The market generally is quiet, but whatever tendency towards price changes there are, are in the direction of advance. In a few instances a very strong demand is reported, arising out of the war requirements.

The wholesale trade in northern pine at Buffalo is rather quiet, although improvement is shown as compared with a few weeks ago. There is still very keen competition, however, between northern pine and other woods. Lower grades are fairly active and firm, but the volume of trade in the better grades is small, although it seems to be increasing. At North Tonawanda the market conditions are better. Prices are a little firmer and slight advances are expected on a few of the lines in chief demand. There is a little more snap to the market for hemlock at North Tonawanda. Retailers are placing orders more freely and wholesalers are hopeful that there will be a fair fall trade. The hardwood trade at Buffalo is steady and improvement is expected at an early date. Birch and maple are selling fairly well in the better grades and there is a good movement also in oak. The furniture trade is quiet. Prices of southern pine at Buffalo show little change, but the market is fairly firm, especially in the better grades. Mills are now quoting long leaf wholesalers' prices about as follows:—1 x 4, B and better flooring, $23.25; No. 1 common, $21.25; No. 2 common, $14.25; No. 3, $12.25; No. 1 common siding, $21; No. 2 common, $17.25; No. 2 common boards, 1 x 8 x 10, $19.

Great Britain

The spot market at London continues remarkably active. A great deal of business is still being negotiated. New arrivals of goods are going overside rapidly, most of which are going into actual consumption. The sawmills are all fully employed and there is no indication of any lull. Recent arrivals have been numerous and, on account of the labor shortage, the docks are still congested. The absence of arrivals of white sea stocks in normal quantity is making itself felt. The remarkable advances in prices which have taken place during recent months do not seem to have interfered in any way with deliveries. All new business is being transacted on cash terms, the seller taking all risk of freight and delivery. Deliveries at London docks during the latest week for which reports are available amounted to 8884 standards as compared with 4717 standards during the corresponding week of last year. At Foy, Morgan & Company's recent auction sale, 3 x 11 fourth Montreal pine, brought £17 15s., 4 x 9 u/s St. John spruce sold at £16 5s., and 3 x 10 u/s Halifax brought £17 10s. First Quebec spruce sold at £24, 5th at £16, u/s Halifax at £16 10s. 3 x 8 fifth Quebec sold at £15 10s. and 3 x 7 at £15 5s.

The trade at Liverpool continues fairly satisfactory. There is no important change to report. The quays at the North Docks are congested with cargoes of deals awaiting shipment to country districts, and several vessels are continually waiting for berths. These are mostly small sailing vessels with spruce deals from St. John and Halifax. There is a much better tone in connection with the spruce c. i. f. trade. Shippers are not particularly anxious to sell and are apparently waiting for better values. Spot values show a tendency to advance. Consumers are looking for safer prices and are rather puzzled by the recent easing off. Considerable advantage was therefore taken of the temporary decline and purchases have been large. Importers' and consumers' stocks were never so low at this time of year as they now are. Birch c. i. f. values at Liverpool continue firm and are likely to remain so. The actual amount of business in progress is not large. The spot market for birch is firm. Recent arrivals are practically all going direct into consumption. The market for Canadian pine deals at Liverpool is very firm. At Manchester prices are steadily advancing.

View of Mills in Sarnia.

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Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Trade Very Quiet

St. John, N. B., Sept. 7th (Special to the Canada Lumberman):—No change has occurred in either local or foreign markets, as far as St. John is concerned, during the past two weeks. Trade remains in a very stagnant condition. Shipments have been very light, in fact very few deals have been lifted during this time, it being the worst month so far during 1915. All the shippers claim that prices have receded. Freights have not in any way become easier either from the standpoint of number of vessels or rate of freight. No price can be quoted for deals from this port, as none have been sold at the wharves. All the mills sawing having sold ahead. Any persons having deals to sell at this time find it almost impossible to locate a purchaser. All lighters in the harbour are filled with deals from rotary mills and wharves are getting pretty well piled up. Whether these will be shipped this fall remains to be seen. Very few charters have been covered to load during the next two weeks. Mackays have a ship now overdue, which will, in all probability, carry away about two million feet, but this will only be as a drop in a bucket compared with stocks here. Locally no advancement has occurred. All the wood working factories are finding it hard enough to get orders to keep them busy even though the crews are small.

No further drop in prices has occurred and, it being well along in the season, it is felt that no further cutting will occur. We cannot quote prices, as there is no set scale to follow under present conditions. Collections are only fair, and many parties who contract for houses are finding it almost impossible to find any persons willing to back them in the building venture. Carpenters and contractors are in the market but no work can be located to keep them busy.

No failures or important changes have occurred, and all persons in the trade here are well able to care for themselves. Some French cargoes are being manufactured. Laths and shingles remain unchanged. The higher grades of shingles are hard sellers with no improvement in price.

No contracts have yet been made for next year's business and unless things show a change for the better before the next month, the cut of logs on the St. John will be very much reduced. No prices have yet been made for logs, but if the price of lumber has any bearing on the price of logs, a material reduction must take place or the mills remain idle in 1916.

It is to be hoped that the next two weeks will show some improvement abroad which would undoubtedly cause improvement locally and reflect all through the trade.

Montreal Market Quiet

Montreal, September 10th (Special to the Canada Lumberman): The building permits for last month and the year to date give a sufficient reason for the dullness of the local market. The latest returns show a decided tendency on the wrong side. During August the total was only $309,763, a decrease of $804,982. Up to the end of that month the permits were valued at $4,161,362, a decline of $7,996,815. Fortunately there is something to be said on the other side. The United States trade has been a redeeming feature, and the country centres continue to take a fair amount of lumber. The province has had a good harvest, and we may look for a little relief in this direction. Most lumbermen believe that there will be a real revival in business when hostilities cease, to make up for the anxious period which they have experienced.

There is still considerable activity among shippers to the United Kingdom, efforts being made to send lumber before the grain season gets into swing. It may be that there will be more room available than is at present contemplated, as three more lake vessels have been added to the Atlantic service, and the British Government, it is reported from Ottawa, have promised to release enough vessels to take care of the harvest. Rates continue to hold firm, with an inclination to rise within a very short time. As regards the immediate outlook for shipments, the amount of spruce to be exported will no doubt be somewhat influenced by the British market. The demand there is reported to be by no means satisfactory, the comparatively high prices, due to conditions, being a deterrent factor.

While the ground wood market is dull, there are signs of a strong upward movement in chemical descriptions. This is due to smaller consignments from Scandinavia to the United States, Germany taking a considerable quantity which in normal times would go to the United States. The latter country is consuming a very large tonnage of this pulp, and appearances are that, with an increased demand and a shortage in supplies, prices will materially increase.

The Mayor of Montreal has sent a letter to the principal lumber merchants of the city asking them to contribute any spare lumber for the benefit of the poor during the winter.

Ottawa Mills Running Steadily

Ottawa, Sept. 11th (Special to the Canada Lumberman):—It is the intention of the lumbermen in Ottawa and district to continue to operate their mills until the winter sets in, as has been the practice in other years. Meanwhile, preparations for the season's work in the woods are going ahead. Mr. J. R. Booth has already put in several camps. Shepard and Morse have decided to operate two camps on the Ostabonning River. On the whole, the cut next winter will be about 25 per cent. less than last winter for this district.

The late Mr. W. H. Rowley, President of the E. B. Eddy Company, of Hull, P.Q., left an estate valued at $697,583.

Mr. M. J. O'Brien, of Renfrew, the well-known contractor, lumberman and millionaire, has undergone an operation for peritonitis. The operation was successful and the latest reports state that he is making good progress towards recovery.

Lieut. D. J. O'Donahoe, secretary-treasurer of the McAuliffe-Davis Lumber Company, who recently joined the 77th Battalion for overseas service, has been appointed assistant adjutant of the battalion.

An order for 50,000 boxes for high explosive shells has been given to the firm of Estate James Davidson, at about $1 per box. This order has necessitated the firm taking on additional men. There are now 250 employed in the factory at 10 hours per day.

Two boys, Emil Dupuis and Emil Boulay, have been found guilty of incendiarism in connection with the series of fires at the Gilmour and Hughson yards, at Hull, P.Q., and have been sentenced to 12 and 14 years imprisonment respectively.

Quebec Cullers' Report

The Supervisor of Cullers' Office, Quebec, P. Q., furnishes under date of September 7th the following comparative statement of timber measured and culled to date:—

	Cubic Feet 1913	Cubic Feet 1914	Cubic Feet 1915
Waney White Pine	216,600	546,240	395,120
White Pine	7,560		
Red Pine	960	1,040	
Oak	115,840	292,560	104,960
Elm	211,520	299,280	46,840
Ash	1,000	680	840
Birch and Maple	47,680	50,800	48,880

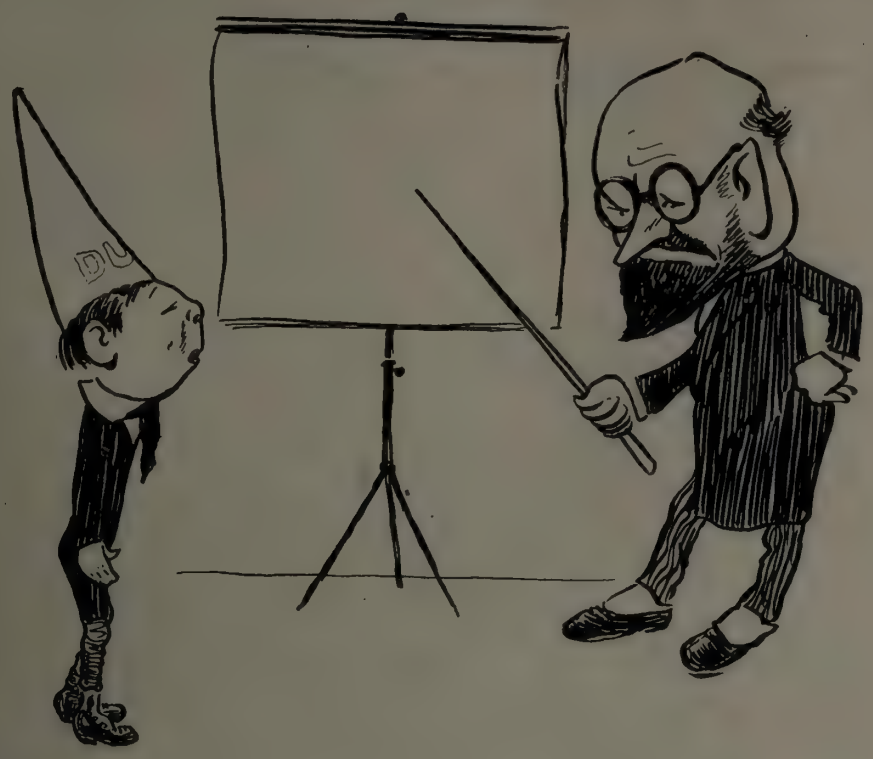
Barbados Market Report

S. P. Musson, Son & Co., Barbados, report under date of August 6th, as follows: Lumberstuffs.—White pine—No receipts, but the cargoes which have been sold to arrive will fill dealers' requirements. Spruce—Trade is dull, and stocks at the moment are ample. Shingles—There have been no arrivals, but the market is fully supplied with every description. Shooks and wood hoops—No receipts.

Mr. Robert Westgate, senior partner of Robert Westgate and Sons, saw mill owners and lumbermen, Cookshire, P. Q., was shot and killed on September 3 by Joseph A. Sanschagrin. The latter had a dispute with Mr. Westgate as to the amount of wages he should receive for work in the mills. He thereupon shot his employer through the lumgs, death being almost instantaneous. Sanschagrin escaped by swimming across the river. He was pursued by a number of armed men, and when cornered, placed the revolver at his head and fired, inflicting a serious wound. Mr. Westgate was 62 years old, and two of his four sons are associated with him in business. Another, Charles, is at the front.

Spruce Wanted by English Office of Works

The Department of Trade and Commerce, Ottawa, has been informed by cable that the Office of Works, London, England, are prepared to consider prices of spruce 1, 2 and 3 in. thickness up to 3 to 9 in. width f. o. b. Montreal. Information is asked for as to quantities available and dates of shipment. All details should be sent to the Acting Canadian High Commissioner in London who will forward them to the Office of Works.



A HARD LESSON

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Price does not establish Value. You know from experience that some of the most expensive material you have ever bought was purchased at the cheapest price.

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The Problem of Slash Disposal

STUDY OF ITS IMPORTANCE AND THE PROGRESS ALREADY MADE IN THE REDUCTION OF FOREST FIRE DESTRUCTION

By Clyde Leavitt, Chief Forester Commission of Conservation

Beyond any doubt, fire is and always has been the greatest enemy of the forest. Lumbermen, as a class, are therefore interested in everything which pertains directly or indirectly to the prevention or control of forest fires. This is theoretically true, notwithstanding the fact that, even yet, some lumbermen—now happily a minority—apparently base their practice upon the theory that for the most part preventative measures are impracticable, and that only Divine Providence, through the agency of rain, is able to extinguish a forest fire once it gets under way. When such lumbermen, together with a considerable portion of the general public, once realize what is really practicable in the way of reduction of the fire loss, and how well worth while such results would be from every point of view, a revolution in existing policies and methods will follow that will at once check the present process of annually converting vast areas of non-agricultural lands into a desert condition.

Although material improvements have taken place in recent years, still the situation as a whole is far from satisfactory over any considerable area anywhere in Canada. Some of the points in connection with which further action is urgently needed are as follows:

1. Adoption of the merit system for the appointment of fire-rangers, replacing the system of political appointments now generally in effect.

2. Larger staffs of fire-rangers. For the most part, the present staffs are inadequate to afford really efficient protection.

3. Appropriations on a much more generous scale for the construction of permanent improvements in forest sections, such as roads, trails, telephone lines, lookout stations, etc. Such works greatly facilitate the efforts of fire-ranging staffs.

4. Closer supervision of fire-rangers in the field. Experience shows that this is imperative, if efficient results are to be secured. Too often, in the past, fire-rangers have had practically no supervision, and money thus spent is largely wasted.

5. Closer co-operation between all interests concerned with forest protection. In provinces where the limit-holders are required to bear the whole cost of fire-ranging on their limits, as is generally the case in eastern Canada, experience shows that the best results are secured by the organization of co-operative associations. Of these, two are already in existence in the province of Quebec, covering an area of some fifteen million acres. It is greatly to be hoped that this movement will spread, not only in Quebec, but also into Ontario and the Maritime Provinces. There has been brought out, in the work of co-operative fire protection, a curious attitude of mind on the part of some of the men in charge of logging operations of firms and corporations who are association members. Either because they are too ignorant to appreciate the value of fire protection or are jealous of any intrusion on what they consider their own special domain, or are afraid that the crude and wasteful way they carry on their operations will be discovered, these men put obstacles in the way of fire rangers and let their subordinates and foremen see their hostile attitude, with the result that fires are set by drive crews, dam keepers and other woods workers. This causes the anomalous situation of a concern paying several thousands of dollars each year to put out fires set by its own employees, all of which could be prevented by proper discipline. The spirit of true co-operation should be instilled into these men by their managers. Only by real co-operation and the elimination of petty jealousies can the best results be accomplished.

6. A translation into practice of the theory that it is both practicable and desirable to afford protection to cut-over and even to burned-over lands, in order that the young forest growth may have an opportunity to reach maturity. Especially in Ontario, considerable areas of cut-over limits are abandoned every year by the limit-holders, and left with little or no protection from fire. Repeated fires upon such lands turn them rapidly into a non-productive or desert condition. Such lands should be the especial care of the Crown, thus ensuring the perpetuation of the forest and thereby the perpetuation of the forest revenues and forest industries. For the most part, we are now subsisting upon capital, which must necessarily become exhausted in time. The restocking of the cut-over lands will, to a large extent, take place naturally, in time, if repeated fires are prevented.

7. The reduction of the fire hazard through safe disposal of inflammable debris.

Slash Disposal—Reducing the Fire Risk

All the above features of the fire-prevention program are more or less inter-related and inter-dependent. It is, however, with the last that this article is especially concerned.

There is now a well-recognized and well-supported movement for the prevention of city fires through the elimination of unnecessary hazards. Similarly, the railways and other industrial concerns have

On a British Columbia timber limit. Logged over area after being slash-burned.

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Pure Lard
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Belgo Canadian Pulp & Paper Co., Shawinigan Falls, P.Q.
Spanish River Pulp & Paper Mills, Spanish River, Ont.
Spanish River Pulp & Paper Mills, Sturgeon Falls, Ont.
Bayless Pulp & Paper Company, Ste. Anne, P.Q.
Anglo-Newfoundland Development Co., Newfoundland.
Albert E. Reed & Company, Newfoundland, Limited.
Price Brothers Company, Kenogami, P.Q.
Chicoutimi Pulp Company, Chicoutimi, P.Q.
Baie St. Paul Lumber Company, Baie St. Paul, P. Q.

Ryther & Pringle Company, Carthage, N.Y.

An unlopped spruce top—a grave fire danger.

A good example of lopping—debris will quickly disintegrate.

made much progress, through the "safety first" movement, in the direction of avoiding unnecessary accidents and loss of life. The movement for the more effective prevention of unnecessary forest fires is just as logical as either of the above, and is equally a part of the general tendency toward "safety first" in all lines of endeavor affecting life or property.

The slash disposal problem has sometimes been considered as if it related only to lumbering slash. This, however, is not the case, and it may be of interest to consider some other angles of the situation as well.

(a). **Debris on railway rights of way.** In former times, and more especially during the periods of early railway construction, relatively little attention was paid to the matter of safe disposal of inflammable debris resulting from construction work and from the annual growth, on rights of way, of vegetation such as grass, weeds, brush, etc. As a result, many large and destructive fires occurred, due to various causes, such as locomotive sparks, coals dropped from ash-pans, carelessness of railway employees and tramps, cigars and cigarettes thrown from moving trains, etc. However, the Railway Act has for years required that the railways maintain their rights of way in a condition free from dead or dry grass, weeds and other unnecessary combustible matter. During the past few years, especially marked improvement has been made in the condition of railway rights of way, and the fire hazard has been correspondingly decreased. However, the hazard is by no means eliminated, on account of the large amount of inflammable debris still remaining on lands immediately adjoining railway property. Such lands include settlers' clearings, timber limits, unlicensed crown lands, and privately-owned forest lands, on none of which has really adequate provision been made as yet for the protection of the public interest through reduction of the fire hazard. In other words, in none of these cases has even an approximation to the same degree of efficiency in reducing the fire hazard yet been secured as in the case of railway rights of way.

(b). **Settlers' Clearings.** Practically everyone (except the settlers directly concerned) now recognizes that it is undesirable to permit settlement on lands where the soil is not suitable for the permanent production of agricultural crops. Nevertheless, large areas of non-agricultural forest lands have been permitted to be settled in the past, and the practice is not even yet altogether stopped, largely on account of local political pressure. Aside from the direct injustice done to limit-holders, and the fact that such settlers cannot make a decent living from their lands after the timber is gone, the practice of permitting such settlements is directly contrary to good public policy, on account of the great increase in the danger of fire spreading to adjoining timber lands. This danger exists also in forested sections where settlement is entirely legitimate, and is due in both cases to the widespread carelessness of settlers in disposing of their clearing debris by burning at unsafe times.

The province of Quebec has a law forbidding the burning of settlers' slashings during certain periods of the year, except upon permit issued by a forest office. However, the provision for the enforcement of this act is inadequate, on account of insufficient appropriations for personnel, and on account of the difficulty in securing convictions and adequate punishment, resulting usually from undeserved sympathy for the offender, or from political interference.

The government of New Brunswick has recently improved the situation in that province through the issuance of a regulation prohibiting the burning of settlers' slashings in the settlements of Hazen and Grimmer, except upon permit from a forest officer. This provision should, however, be extended to the remaining forest sections of the province, and adequate personnel should be provided to make it effective.

In Ontario, there seems to be practically no control over settlers' burning operations, and as a result many serious fires have occurred, causing the loss of quite a number of lives, as well as of probably several millions of dollars worth of timber and other property. There would seem to be no good reason why settlers' slash-burning operations in Ontario should not be closely supervised, with either the establishment of a closed season or of a permit system. The necessity for such action is fully recognized in British Columbia, where a permit system is in effect, as well as in Quebec and a section of New Brunswick. The same is also true of the Dominion forest reserves in the west.

Undoubtedly, the lumbermen, both individually and through their various organizations, could assist materially in hastening the day when action will be taken to remedy the defects to which attention is called above. Various agencies, including the Commission of Conservation and the Canadian Forestry Association, have made repeated representations along these lines, but such reforms come slowly, and continuous pressure from all available sources is apparently needed. A general demand from the public will usually be heeded, while, without it, action may be slow in coming.

(c). **Road Slash.** The provinces generally have recognized the fact that slash resulting from wagon road construction in forest sections constitutes a serious fire menace, if allowed to remain piled up along the roadway. Especially during recent years, provision has usually been made for the piling and burning of such debris, at the time that construction has been under way, care being taken to prevent the spread of the resulting fires to adjacent timber lands. As to debris along old roads, the situation is generally less satisfactory, and it will require years to remedy this condition. The above is cited as one more example of recognition that inflammable debris in forest sections constitutes a distinct menace to the public interest, and that measures for its abatement are fully justified.

(d). **Lumbering Slash.** No one will deny that lumbering slash constitutes a very serious fire hazard, or that in the great majority of cases such slashings burns sooner or later, usually during periods of drought, when the resulting damage to soil, mature timber and young growth will be greatest. The question concerning which the difference of opinion arises is as to what it is practicable to do about it. Since most of the accessible merchantable timber is included within timber limits on crown lands, this is a question which for the most part involves the relations between the limit-holders on the one hand and the respective governmental agencies on the other.

Particularly on lands cut over or about to be cut over, the primary object of fire protection is the perpetuation of the forest, by giv-

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We have a large lot of all kinds of supplies for the camp table, and in this time when many lines of goods are so very high in price, we are offering some excellent substitutes for what has usually been the custom of using.

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ing the young growth a chance to mature. In this, the public interest is dominant, and it is therefore logical to expect at least the bulk of the added expense to be borne by the public, or, in other words, by the government. All experience, however, goes to show that, to be practicable, the process of whatever system of brush disposal may be decided upon, should be an integral part of the logging operation, and must, therefore, be handled by the operator. The added cost on existing limits can be very easily taken care of in connection with the periodical readjustments of ground rent and stumpage dues, by taking the added requirement of brush disposal into consideration and fixing the money payments accordingly. On this basis, it could scarcely be maintained that a requirement for brush disposal by limit-holders would be a hardship, especially since all competitors, at least within the province taking such action, would be subjected to the same requirements, in which event the market prices would be based upon total costs, which would include brush disposal, and all operators would be on an equal footing.

In the case of licenses to be issued in the future, a provision requiring some suitable form of brush disposal should be inserted in each license, and the tenders made on this basis. There could in such cases be no claim of hardship to the operator, since brush disposal would be figured into the cost of the operation and the payment for bonus adjusted accordingly. This is the basis on which timber sales are handled in the National Forests in the United States, and the plan has worked admirably.

Provision Already Enacted

Only a beginning has been made, as yet, in the matter of brush disposal on logging operations in Canada. The question is, however, a live one and will have to be dealt with in the course of time.

Timber licenses on Dominion Crown lands in the west contain provisions under which brush disposal can be required, though but little advantage has so far been taken of them. The Dominion Forestry Branch, which has jurisdiction over Dominion forest reserves exclusive of licensed lands, has made considerable progress in securing the piling and burning of brush on timber sale areas, which, however, are relatively small in extent. It is, however, unfortunate that no such action has been taken with regard to timber limits on Dominion lands, which are under the administration of another Branch. The desirability of such action has, however, been fully recognized through the insertion of adequate provisions in the licenses, as above noted, and it is only a matter of time until they will have to be made effective.

The province of British Columbia has also recognized the necessity for some form of brush disposal, in order to permit the forest to perpetuate itself. New licenses and sales contain adequate provisions, and are enforced, and considerable progress has also been made through voluntary action of the holders of older licenses, particularly in the Douglas fir coast region, where the slash is burned broadcast, following a practically clean-cutting operation. Such burning is done either in the spring or fall, when weather conditions are favorable.

In Ontario, some few attempts have been made by the provincial authorities to provide for brush disposal, in connection with new sales of pine, but no definite results have been secured. In this matter, as is the case also in Quebec and New Brunswick, the developments are mostly for the future. Some experiments have been conducted by the Laurentide Company on their Quebec limits, and will be continued during the coming winter. In Ontario, J. R. Booth has taken a distinctly progressive step by piling and burning the debris on a narrow strip through a portion of his limits adjoining the Canadian Northern Ontario railway, east of North Bay, in order to reduce the menace to standing timber. Other limit-holders could well afford to follow this example. Through Algonquin Park, the Ontario authorities have, during the seasons of 1914 and 1915, had a gang of men at work piling and burning the inflammable debris on a strip of land adjacent to the Grand Trunk right of way. This work has been carried forward in co-operation with the railway company, the right of way being thoroughly cleared at the same time. The beneficial results are unquestionable, and the project reflects great credit upon all concerned.

In Quebec, there is promise of an entering wedge, in the shape of a proposed order-in-council, requiring the disposal of inflammable debris in timber limits on a strip one hundred feet wide on each side of railway rights of way. Such a provision would be admirable as far as it goes, but should be so simplified as to cover a much wider range of conditions.

In general, it may be stated that no one form of brush disposal should be advocated for all conditions. The method should be adapted to the local conditions in every case, balancing the cost against the results to be secured. Under some circumstances, piling and burning of all debris is justified; in others, it will be practicable only to pile and burn on a strip around the cutting area, thus forming a fire-guard. In some places, only piling should be advocated, to check the spread of fire. In the spruce-balsam forests of the east, there is much in favor of merely lopping the tops so they will lie close to the ground and decay quickly. Some approximation to this is already reached in the case of an up-to-date pulp wood operation, where the material is utilized in the tops to a diameter of three or four inches. On the other hand, it may be found practicable, in many cases of winter operations on such lands, to pile and burn the debris as cutting proceeds, thus getting rid of the material at once and at the same time at least partly offsetting the additional expense by lowering the cost of skidding. The whole matter is still largely open for further investigation and experiment. In any event, an intensive patrol should be maintained on all cut-over areas, in order to give them an opportunity to restock.

It goes, of course, without saying, that no very great general progress in brush disposal is to be expected during the present abnormally depressed condition of the lumber industry. There is, however, no good reason why some progress should not be made, and there is every reason to believe that with a little more time the whole problem will be worked out on a basis that will be equitable to all concerned. With approximately three-fifths of eastern Canada suited only to the production of wood crops, the country can most certainly not afford to continue to render such lands unproductive, as it has so largely done in the past. All non-agricultural forest lands should be made to produce successive crops of timber, but this is impossible without a radical modification of some of the existing methods for the prevention as well as the control of forest fires.

Rogers-Buffalo Full Automatic Feed Knife Grinder

The accompanying illustration shows one of the Rogers-Buffalo Automatic Knife Grinders, manufactured by Samuel C. Rogers and Company, 10-16 Lock Street, Buffalo, N. Y. This machine is remarkable for its efficiency and accuracy. It contains the very latest improvements known to the knife grinding art, one of the most important being the automatic feed device invented by Samuel C. Rogers and Company about three years ago, a device which is unique and efficient and gives absolute satisfaction in use. The machine illustrated, which is known as their "Type B Full Automatic Feed Knife Grinder," in addition to the above advantages is especially

efficient because of the entire absence of vibration. This has been eliminated by the substantial support at the centre of the knife bar, assisted by the conical standards at each end. Practical men will realize the importance of this feature in ensuring uniform edges on the longest knives. The machine is adapted for all kinds of grinding, from heaviest to lightest, and grinds both straight and concave bevel. It is furnished complete with 12-in. pure corundum cup wheel with 4-in. face and 2-in. hole; leather belts; emery wheel dressers, wrenches, etc. The tight and loose pulleys are 8-in. diameter and should run at 800 r.p.m. The arbor driving pulley is 2⅝-in. diameter and the lower carriage pulleys are 11½-in. diameter. The machine can be built with direct drive motor, if so desired, at small additional cost.

Samuel C. Rogers and Company also manufacture many other types of machines containing the automatic feeding device, although they also send out a large number of grinders not so equipped. These other machines are automatic in that the knife is carried back and forth in front of the grinding wheel automatically, but it is necessary to feed the knife up to the wheel by hand. The new automatic feeding device does away with all hand work. The company guarantee each machine to give satisfaction and do not hesitate to send them on approval to responsible concerns.

The Arkansas Soft Pine Bureau, Little Rock, Ark., have sent out to lumbermen throughout the United States an interesting series of samples of Arkansas soft pine treated with stains and varnish, the object being to show very definitely what a valuable wood Arkansas soft pine is for the retail lumbermen to stock.

Rafting operations on the St. John River by the St. John River Log Driving Company, at Fredericton, N. B., were completed early in September. The amount rafted this year is about 57,000,000 feet, practically the same amount as last year.

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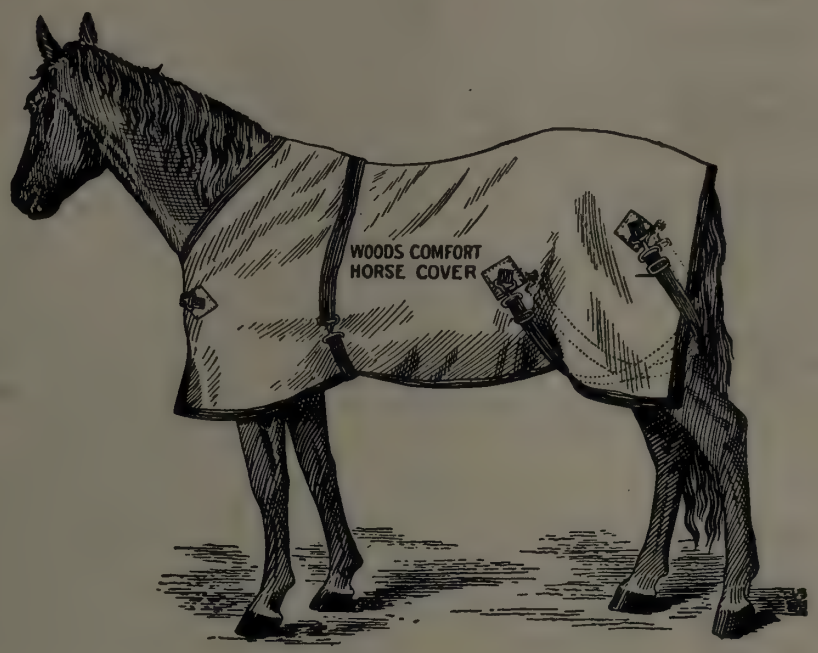

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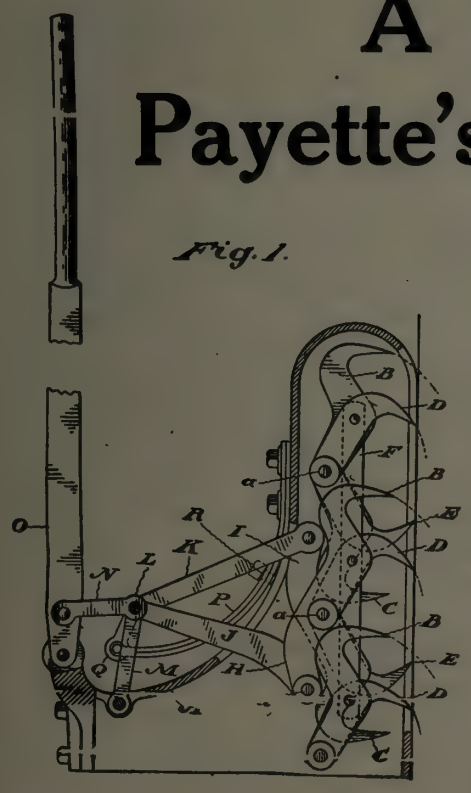
Payette's Famous Patent Mill Dogs
650 Sets already sold

Fig. 1.



BECAUSE

(1) They will dog with perfect ease and safety in any class of timber.
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(3) Will dog the last board, just as easily as they dogged the first one.
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We also manufacture the following High-Grade Saw-Mill Machinery;—New Modern Saw-Mill Carriages, with either three or two head blocks; P. Payette's New Patent Saw-Mill Dog, for use in either winter or summer. P. Payette's Grip-Set Works; Steam Feed Valves, Steam Lifter and Loaders, Valves. Five different classes and styles of Edgers, for either light or heavy duty. Combined Gang-Circulars and Edgers, or Independent Gang Circulars.
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EDGINGS

Ontario

Mr. Wm. Weir of the firm of Weir and Weir, St. Marys, Ont., has purchased the Brown Planing Mill at St. Marys.

A report from Sarnia, Ont., states that the Laidlaw Lumber Company, of Sarnia, Ont., have received from a Detroit firm an order for 400,000 feet of pine lumber.

The lumber yards, etc., belonging to James McCreary Sr., Arnprior, Ont., were recently destroyed by fire. The amount of the loss is estimated at $12,000 including buildings.

J. F. Miller and his son, C. H. Miller, have purchased the timber limits of J. D. McArthur at Atikokan, Ont., and have erected two small portable sawmills. They expect to operate throughout the winter.

McKenzie & Mills, Crozier, Ont., near Fort Frances, Ont., recently lost part of the stock of lumber in their yard by fire which was communicated to the yard from adjoining bush fires. The loss is partly covered by insurance..

The McBrayne Sawmill, about six miles east of Parry Sound, Ont., was recently destroyed by fire. The portable engine was safely removed but the rest of the machinery was considerably damaged. The mill was a new one and there was no insurance.

George Gordon & Company Ltd., Cache Bay, Ont., will immediately rebuild their sawmill, which was recently destroyed by fire. The estimated cost of the new mill is $75,000. The erection of the plant is in charge of Alexander Trottier, Cache Bay, Ont.

A Parry Sound report states that the Spanish River Lumber Company are constructing a 50 mile temporary road through their timber limits north of Massey, Ont., in order to facilitate their lumbering operations. At present a 3 ton Packard truck is operated daily over 20 miles of this road taking in supplies for the camp.

During the heavy storm on September 12th the waters from Lake Huron were piled up into Sarnia Bay so rapidly that a large log boom, belonging to the Cleveland-Sarnia Saw Mills Company, gave way and from 30,000 to 50,000 logs were set adrift. The company had to send out tugs to gather in the logs, but expected to recover most of them.

Tenders are being called for up to noon on September 18th for the purchase of the equipment and plant of a planing mill at Port Hope, Ont. The equipment includes several machines, belting, etc. The building is suitable for a door, sash and blind factory and contract work. The plant is run by water power. Tenders are to be addressed to T. B. Chalk, assignee for L. E. Hall, Port Hope, Ont.

The Canada Cheese Box Company Ltd., have been incorporated with head office at Ottawa, Ont., and capital stock of $90,000, to carry on business as manufacturers and dealers in cheese boxes, timber, lumber, mechanical and ground wood pulp, sulphite pulp, and all articles manufactured from wood. The incorporators are B. Moses, R. K. Milks, W. E. Scrivens, J. A. Macdonald, J. T. Lawson, all of Ottawa, Ont., and H. A. Stinson, of the Village of Britannia, Ont.

A report from Muskegon, Mich., states that the Central Paper Company is investigating several propositions made to it by Canadian towns for establishing sulphite and sulphate mills for the production of wood pulp. The company is considering this plan so as to be able to meet the competition of New York paper manufacturing companies which have established plants in Canada. Mr. E. J. Geddes, assistant manager of the company recently visited the Georgian Bay district in this connection. The company is also making investigations into a proposition in the Lake Superior region.

Eastern Canada

Chas. Durocher & Company, Iberville, P. Q., manufacturers of sash and doors, have been registered.

The McLeod Pulp Company's sawmill at Milton, N. S., which was recently destroyed by fire was insured to the extent of $9,000.

The planing mill belonging to Hebert Elzear, Montreal, P. Q., was recently destroyed by fire. The loss was covered by insurance.

Victor Varin, sash and door manufacturer, Montreal, P. Q., recently suffered a serious loss by fire, which was covered by insurance.

Lambert & Frere, Montreal, P. Q., recently suffered a loss by fire, in which part of their lumber stock was damaged. The loss was covered by insurance.

The new pulp mill of the Bathurst Lumber Company, Bathurst, N. B.,

commenced manufacturing unbleached pulp last month. The company expect to be producing bleached pulp in a short time.

Fred. Crosby's rotary lath and sawmill at Upper Gagetown, N. B., was recently destroyed by fire. The stock of lumber was saved. The plant was insured for about one-third of its value.

The limits of the St.-Simeon Lumber Company, Doreil, P. Q., were recently visited by fire and considerable damage was done. The company lost a large camp with provisions. The horses were only saved with great difficulty.

Fire recently destroyed a large number of bales of pulp belonging to the Chicoutimi Pulp and Paper Company at Chicoutimi, P. Q. It is stated that the fire originated from sparks from a ferry boat. The damage amounted to about $20,000.

A contract has been completed by the Berlin Mill Company of Berlin, N. H., through their agent, Mr. W. A. St. Laurent, for 24,000,000 feet of pulpwood in the vicinity of Cartierville, P. Q., to be delivered at the rate of 4,000,000 feet per year. Preparations for the work have been commenced and the actual operations are expected to begin about the end of October.

The Martinon Lumber Company of New Brunswick has recently been incorporated. The officers of the company are Hon. I. K. Stetson, Fredericton; F. C. Hinckley, I. G. Stetson and W. F. Lowell. The company have acquired large timber land holdings in New Brunswick and will carry on extensive business in timber and lumber manufacturing.

Western Canada

The Beaver Lumber Company, Melfort, Sask., has opened a yard at Pleasant Valley, Sask.

Bush fires recently destroyed a sawmill at Newton, B. C., and the King Lumber Mills at Timberlands, B. C.

A. Lopston, lumber dealer, Bredenbury, Sask., has sold out his business to the Monarch Lumber Company, Ltd.

Fire at Cowichan Bay, Vancouver Island, B. C., recently destroyed about 1,600 cords of wood and a small portable sawmill plant.

The Otis staples Lumber Company, Wycliffe, B. C., commenced operating its plant on day and night shifts about the end of August.

Sawyer Bros., Revelstoke, B. C., recently lost their lumber mill by fire. The loss amounted to $6,000 and the insurance was $3,000.

Reports from New Westminster, B. C., state that the forest fires in its vicinity and along the lower Fraser Valley have now subsided.

The City Council of Winnipeg, have given a contract for creosote wood block to the Kettle River Quarries Company Ltd., Minneapolis, Minn., U.S.A., at $2.19 per square yard.

The Raven Roy Shingle Manufacturing Company Ltd., has been incorporated with head office at Hatzie, B. C., and capital stock of $10,000, to carry on business as manufacturers and dealers in timber, lumber and wood of all kinds.

The appeal by the Great West Lumber Company Ltd., Winnipeg, Man., against the judgment recently given in the case of the Northern Crown Bank against the company, involving a sum in the neighborhood of $500,000 has been withdrawn.

The Betterton Saw Mill at Brookmere, B. C., recently commenced operations. The company has an order for some 3,000,000 feet of lumber from the Guthrie, McDougall Company, contractors, who are erecting snow sheds along the Kettle Valley Railroad.

The Star Lumber Company's Shingle mill fourteen miles south of Revelstoke, B. C., was recently destroyed by fire. The loss is estimated at about $10,000 and includes all the machinery and the overhead tramway. It is reported that there was no insurance.

J. E. Trethewey's logging camp and supplies near Newton, B. C., were recently destroyed by fire. Mr. Trethewey not only lost his camp buildings and supplies, but his complete logging outfit, in the extensive bush fires prevailing in that neighborhood. All that he managed to save was 2 donkey engines.

The Otis Staples Lumber Company, Wycliffe, B. C., intend to operate extensively in the woods this winter, and will also keep their mill running day and night. The company recently received from the Canadian Pacific Railway Company an order for 35,000 grain doors. This will require over 1,500,000 feet of seasoned lumber.

Sealed tenders are being received by the Minister of Lands for British Columbia up to the 28th day of September for the purchase of License X383, to cut 4,584,000 feet of Douglas fir, cedar, balsam, and hemlock on an area situated in the vicinity of S. T. L. 38767, Forward Harbour, Range 1, Coast District. Two years will be allowed for the removal of the timber.

Young & Stephenson Inc., have been registered as an extra-provincial company with head office at New Westminster, B. C., and capital stock of $60,000. J. R. Grant, New Westminster, is attorney for the company. The objects of the company are to carry on the business of wood-workers, timber merchants, lumbermen, loggers, sawmill, shingle-mill, pulp-mill, and paper-mill proprietors, and manufacturers of all kinds of lumber and paper in any and all of their branches.

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Dressed as Required, Spruce and Pine—1914 cut.

Merchantable 1 x 4 x 10/13
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all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60 per cent. 12 13 ft.

Cull White Pine—1914 cut

1 in. and 3 in. x 4 in. up x 6/16

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3 in. x 4 in. up x 10/13
3 in x 9 in x 10/13

3,000,000 pieces Mill Run Pine Lath, 4 x 1½ x ⅜, 1915 cut.

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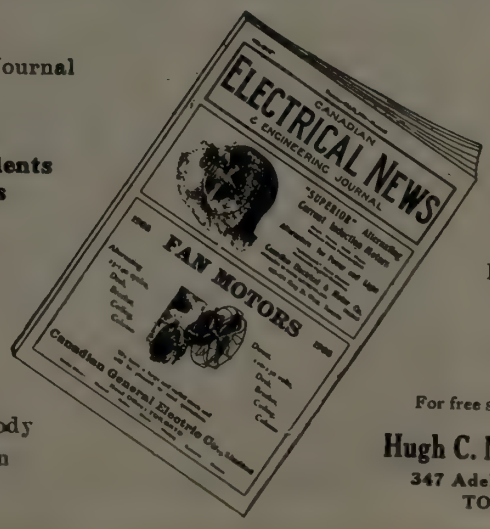

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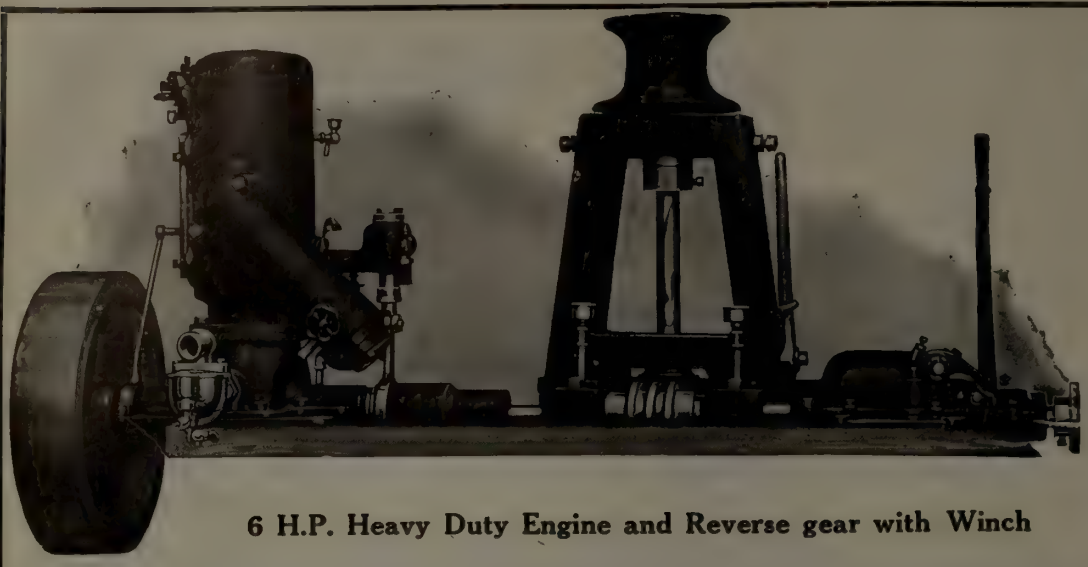

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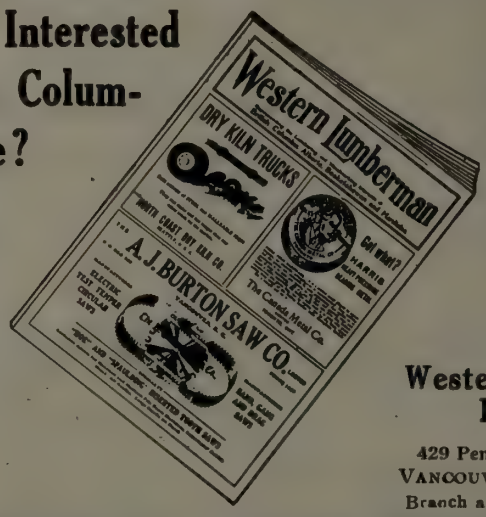

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VANCOUVER, B. C.
Branch at Winnipeg

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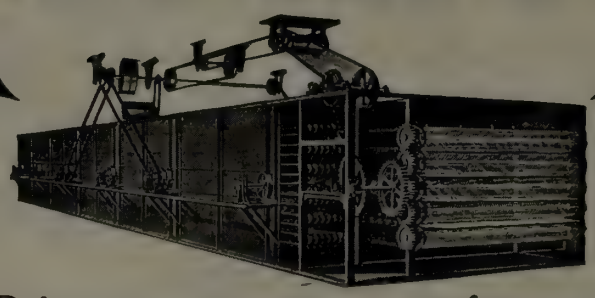

Dries enormous amount of veneer perfectly flat and pliable at minimum cost, without checks or splits

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Get a bag of Caldwell's Molasses Meal, follow the directions for feeding which are attached—and watch your horses improve. You will see them improve in appearance, health and strength.

Camp Horses thrive on Caldwell's Molasses Meal because they obtain the full nutritive value of all the food they are fed.

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¶ You can get the man you want through a small advertisement in the "Wanted and For Sale" department of this paper.

Canada Lumberman & Woodworker
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Montreal Office, 119 Board of Trade Bldg.

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Here's what a manufacturer of pianos and organs says of a

Sturtevant (REG. CAN. PAT. OFF.) **Kiln:**

"We have two dry-kilns which are operated in this manner, one along side of the other; one in which we place the green lumber that is shipped us, what is usually called shipping dry. This stock is all steamed before the suction fan is placed on it. The other kiln we use for lumber that has been on stick on our yard for from one to two years, and on this we do not apply any steam, simply running it through in about ten days for immediate use. The green lumber, however, in the other kiln is steamed several days and is put through drying apparatus for about three weeks before it is taken out. We have never had any case hardening using this method neither have we had any warping, in fact, we are perfectly satisfied with the results."

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Saw Gumming is an All Important Job

And the success of this job in many a saw mill depends upon

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For the reason that they cut cool and clean and fast, even when forced to the limit—and they hold their shape—show long life.

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Suppose you let Carborundum service help you to better grinding service.

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"Wilson Bros." Flooring and Trim

"Wilson Bros." stamped on every piece of this flooring stands for Quality. Look for the name. Hardwood and Pine. **Interior Finish of All Kinds.** Also Hardwood Veneer Doors to detail. We are equipped to fill large or small orders on short notice. Write us for prices.

Wilson Bros., Limited - Collingwood, Ont.

When You Overhaul Your Mill

THERE are wet places in every saw and pulp mill where nothing but the highest class belting can "make good." It is for these wet places that we recommend what most mill-men swear by—our

"ACME WATERPROOF" BELT

This belt is especially made for a rough and trying service. It has less stretch than any other belt by 15 to 25 per cent.

When you are overhauling try a Goodhue "Acme Waterproof" belt. Other Goodhue belts are "Extra" and "Standard."

Prices and Particulars on Request.

J. L. Goodhue & Company, Limited

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In damp places where the ordinary kind of belting goes all to pieces, Neptune belting runs right along, day after day, every joint and every lap as tight as when first put on.

If you are interested in belting we'll send you samples of "Neptune" which you can soak in water. The laps will not loosen, nor, if double belting is used, will the belting come apart between the plies—this we guarantee.

Write for Neptune Book and copy of our new text book "Belting Manual." Both sent gratis upon request.

The Graton & Knight Mfg., Co.

Oak Leather Tanners and Belt Makers
Wocester, Mass , U. S. A.

Representatives in Canada:

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"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:		
1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better ..	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better ...	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing ..	27 00	29 00
1 x 8 common and dressing ..	27 00	29 00
1 x 10 common and dressing..	31 00	32 00
1 x 12 common and dressing..	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common.	25 00	26 00
1 x 12 inch box and common..		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00
Hemlock No. 1:		
1 x 4 and 5-in. x 9 to 16 ft. ...		17 00
1 x 6-in. x 9 to 16 ft.		20 00
1 x 8-in. x 9 to 16 ft.		21 00
1 x 10 and 12 in. x 9 to 16 ft.		22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.		19 00
1-in. No. 2, 6-ft. to 16-ft. ...		16 00
2 x 4 to 12, 10 and 16 ft.		19 00
2 x 4 to 12-in., 12 and 14 ft. ...		19 00
2 x 4 to 12-in., 18 ft.		22 00
2 x 4 to 12-in., 20 ft.		24 00
2 x 4 to 12-in., 22 ft.		25 00
2 x 4 to 12-in., 24 ft.		26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.		16 00
Clear in B. C. cedar, kiln dried		50 00
Douglas Fir:		
Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.		31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.		32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.		32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.		33 00
10x20, up to 32 ft.		33 50
6x18, 8x18, up to 32 ft.		34 00
6x20, 8x20, up to 32 ft.		35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath..	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60	00
Ash, white, No. 1 common	45	00
Ash, brown, 1sts and 2nds, 4/4	50	00
Ash, brown, common and better	39	00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60	00
Birch, 1sts and 2nds, 4/4	39	00
Birch, No. 1 com. and bet., 4/4	39	00
Birch, 1sts and 2nds, 6/4 and 8/4	42	00
Birch, 1sts and 2nds, 10/4 and 12/4..	45	00
Birch, 1sts and 2nds, 16/4	50	00
Basswood, 1sts and 2nds, 4/4	40	00
Basswood, No. 1 com. and bet., 4/4..	30	00
Basswood, No. 2 and 3, common	18	50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44	00
Basswood, 6/4 and 8/4, com. and bet.	38	00
Basswood. 4/4, No. 2 com. and bet...	28	00
Soft elm, 1sts and 2nds, 4/4	40	00
Soft elm, No. 1 com. and bet., 4/4	28	00
Soft elm, No. 2 and 3 common	17	50
Soft elm, 6/4 and 8/4, 1 and 2	42	00
Rock elm, 1sts and 2nds, 6/4 x 8/4..	55	00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37	00
Soft maple, 1sts and 2nds, 4/4	33	00
Soft maple, com. and bet., 4/4	25	00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35	00
Hard maple, 1sts and 2nds, 4/4	37	00
Hard maple, common and better, 4/.	28	00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46	00
Red oak, plain 1sts and 2nds, 4/4..	59	00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65	00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75	00
White oak, plain, 1sts and 2nds, 4/4.	59	00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65	00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75	00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85	00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88	00
White oak, ¼ cut No. 1 common	55	00
Hickory, 1sts and 2nds, 4/4	70	00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75	00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up $52 00	54	00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up ..	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No.. 1 dressing sidings ..	30 00	33 00
Pine, No. 1 dressing strips ..	29 00	30 00
Pine, No. 1 dressing shorts ..	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips ..	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips ..	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips ..	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips ..	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft. ...	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in..	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards: 1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12 ...	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run: mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	10 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce: 1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16' ..	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1¼-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal..	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 30 to 35 feet.	50	60
Ash		
13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40
Birch		
14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35
Quebec Spruce Deals		
12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00
Birch Planks		
1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in. $54	00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00
Cuts and Better	
4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00
No. 1 Cuts	
1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00
No. 2 Cuts	
1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00	65 00
No. 3 Cuts	
1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide..	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00	48 00
Common and Dressing Mill Run	
1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00
No. 1 Barn	
1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00
No. 2 Barn	
1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00
No. 3 Barn	
1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00
Box	
No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00
Mill Culls	
Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00
Lath	
No. 1, 32-in. pine		1 75
No. 2, 48-in. pine		4 25
No. 1, 48-in. pine		4 75
No. 3, 48-in. pine		3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E. 6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension	
2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft...	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50
No. 1 Common Boards	
4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50
Flooring	
4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00
Shiplap—Finished	
6 inch	20 00
8, 10 and 12 inch	21 00
Siding	
6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50
Lath	
No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed) ...	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft. ...	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft. ...	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft. ...	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft. ...	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft. ...	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

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White Pine

Wholesale Selling Price

Uppers 4/4 ....$94	00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 60)

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Look Like Kid.
Wear Like Iron.

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The rates are most reasonable, write us.

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No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00
All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1½-in. spruce laths	4 10	4 20
1½-in. spruce laths	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 20	3 30
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear		3 28

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Every day you put off ordering a supply of these well-known Canadian-made remedies you invite the loss of valuable horses. An ounce of prevention is worth a pound of cure.

Your mail order will receive prompt attention.

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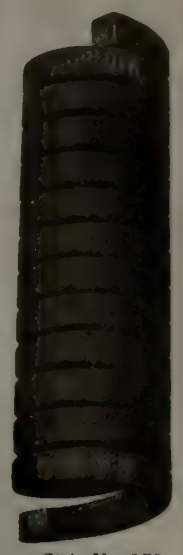

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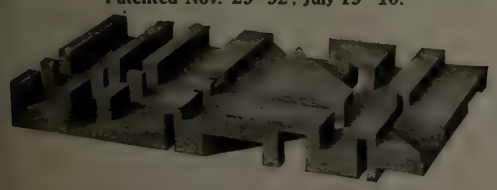

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Harquail Company, Ltd., J. & D. A.
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McLennan Lumber Company
Montreal Lumber Company
Miller Company, Limited, W. H.
Murphy & Company, J. J.
Newman, John P.
New Ontario Colonization Company
Oliver Lumber Company
Parry Sound Lumber Company
Ritter Lumber Company, W. M.
River Ouelle Pulp & Lumber Co.
South Coast & Northern Lumber Co., Incorporated
Victoria Harbor Lumber Company
Wilson Bros.

LUMBER CRAYONS
Superior Manufacturing Company

LUMBER MEASURING REGISTER
Jas. Morrison Brass Mfg. Company

LUMBER TRUCKS
Norman S. Knox

MOTORS
Melchior, Armstrong & Dessau

NORTHERN PINE
Anderson Lumber Company, C. G.
Auger & Son
Beck Manufacturing Company, C.
Blair & Rolland
Burstall & Company, J.
Cameron & Company
Cleveland-Sarnia Sawmills Company
Donogh & Company, John
Eagle Lumber Company
Fesserton Timber Company
Forest Mills of B. C., Limited
Fraser-Bryson Lumber Company
Gordon & Company, George
Gillies Bros. Limited
Graves, Bigwood Company
Harris Tie & Timber Company
Hettler Lumber Co., Herman H.
Hocken Lumber Company
Long Lumber Company
Mackarell & Company, Thos.
Mason, Gordon & Company
Quebec & St. Maurice Industrial Co.
Rat Portage Lumber Company
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Sumber Company
Trudeau, A.
Watson & Todd, Limited

PACKINGS
Can. H. W. Johns-Manville Co., Ltd.
Garlock Packing Company
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

PLANING MILL EXHAUSTERS
Sturtevant Company, B. F.

PLANING MILL MACHINERY
Canadian Blower & Forge Company

POLES
Harris Tie & Timber Company
Pink & Company, Thos.

PRESSES
Boving Hydraulic & Engineering Co.
Perrin & Company, W. R.

PULLEYS & SHAFTING
Boving Hydraulic & Engineering Co.
Dodge Mfg. Company, Limited
Hamilton Company, William
Waterous Engine Works Company

PULP MILL MACHINERY
Boving Hydraulic & Engineering Co.
Hamilton Company, William
Moreau Barking Machine Company

Continued on page 64)

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.

E. J. Macintyre, 1413 Great Northern Bldg., CHICAGO.

NOW

Clothing

Shoes

Silk Hose and

Breakfast-food

are among the commercial by-products of wood. About one-fourth of the tree goes into lumber. The values in the remaining three-fourths are not known.

Ten Years from Now

Lumber may be the by-product of our forests. The economic changes in utilization developed by the meat packing industry will be paralleled with wood.

SCIENCE is discovering new values,

ECONOMICS is eliminating waste,

GOOD BUSINESS is solving the problem of utilization.

Stumpage, bought with discrimination, continues safe, stable, profitable. The present offers investment opportunities that may never be repeated.

James D. Lacey & Co.

Timberland Factors Since 1880

CHICAGO	PORTLAND	SEATTLE
1750 McCormick Building	1310 N. W. Bank Building	1009 White Building

PUMPS
Hamilton Company, William
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

REDWOOD LUMBER
Mershon Lumber Co., John D.
Pacific Lumber Company

ROOFING
Bird & Son
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company
Rat Portage Lumber Company
Rimouski Industrial Company
Tessier, Alphonse

SAWS
Atkins & Company, E. C.
Cocker Manufacturing Company
Disston & Sons, Henry
Hoe & Company, R.
Radcliff Saw Mfg. Company
Shurly-Dietrich Company
Simonds Canada Saw Company
Wilson & Son, Walter

SAW MILL MACHINERY
Berlin Machine Works
Hamilton Company, William
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company
Williams Machinery Co., Ltd., A. R.

SHINGLES
Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Rat Portage Lumber Company
Snowball Company, J. B.
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Hamilton Company, William
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SOUTHERN PINE
Arkansas Soft Pine Bureau
Cameron & Company
Garrett Lumber Company, T. H.
Hobart & Company
Mason, Gordon & Company
Wilson Lumber Company
Wuichet, Louis

SPRINKLER SYSTEMS
Keiths Limited

SPRUCE
Auger & Son
Bartram Bros.
Blair & Rolland
Brown Corporation
Cameron & Company
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
Miller Co., Ltd., W. H.
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL CHAIN
Canadian Link-Belt Company
Hamilton Company, William
McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

SNOW PLOWS
Pink Company, Thos.

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

TIMBER BROKERS
Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS
Lauderburn, D. E.
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TRANSMISSION MACHINERY
Canadian Link-Belt Company

TUGS
West & Peachey

VENEERS
Hoffman Brothers Company
Webster & Bro., James

VENEER MACHINERY
Coe Manufacturing Company
Perrin, William R.
Philadelphia Textile Machinery Co.

VETERINARY REMEDIES
Fleming Bros.

WATER WHEELS
Boving Hydraulic & Engineering Co.

WOODWORKING MACHINERY
American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Hamilton Company, William
Long Manufacturing Company, E.
Mereen-Johnson Machinery Co.
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

WIRE ROPE
Thorne & Company, Limited, W. H.

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

Tillson's Rolled Oats
Rainbow Flour—Top Patent Manitoba.
Goldie's Star—Famous Blended Flour.
Lily Flour—For Pies and Pastry.
Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

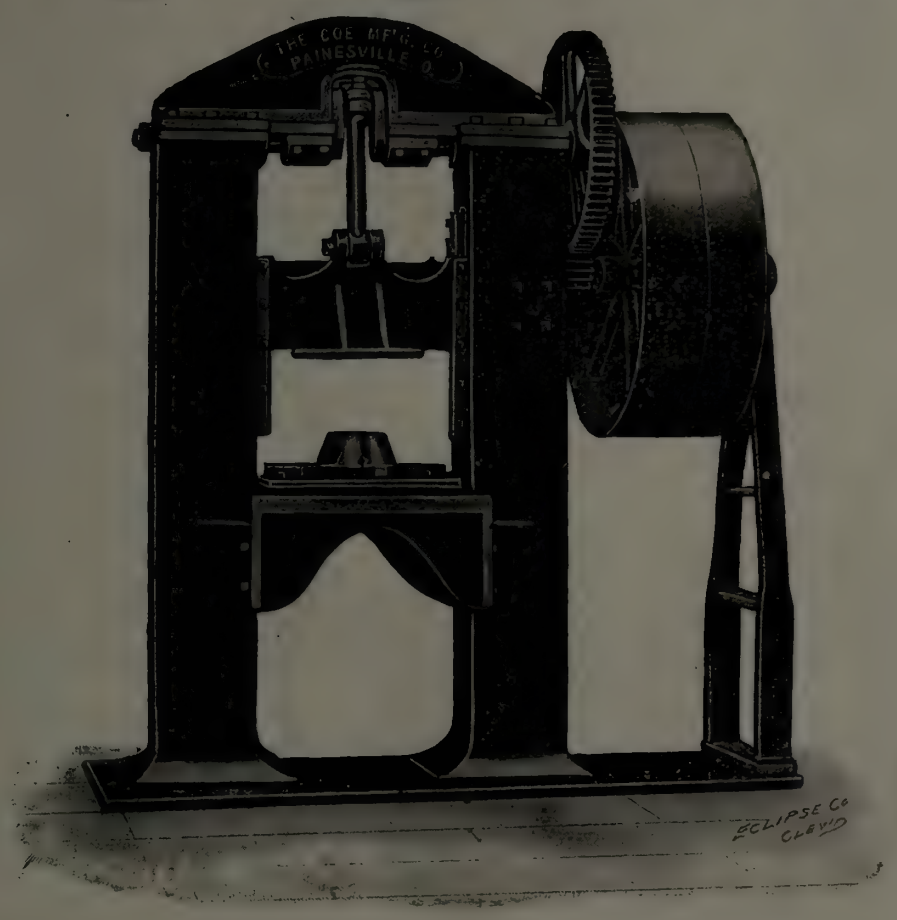
GUARANTEED ABSOLUTELY PURE

Canadian Cereal and Flour Mills Co., Ltd.
TORONTO - - - - - CANADA

Veneer Coe Machinery

Hollow Die Stamping Machine

Heavy
Strong
Massive



Basket
and
Package
Dies

Style "B" Weight 4,500 pounds

This machine was especially designed for use in basket factories for making "Climax" bottoms and covers, taper peach basket staves, berry box patterns, grease and butter packages, bottoms and covers for other packages of any shape.

Its cutting capacity is from 50,000 to 400,000 pieces per day of ten hours, the output, of course, depending on the thickness of stock used.

We can equip the machine with any number of special dies to do your work. All we need are samples of the work you have to do, and we will make the dies to do it.

The machines are very heavy and strong, and with proper care will last a lifetime.

A line to us will bring full detailed description of all or any one of the Coe Machines, Rotary Cutter, Slicer, Drag Saw, Knife Grinder, Clipper, Wringer, Roller Drier. ***Catalogue on request.***

The Coe Manufacturing Co.

PAINESVILLE, OHIO, U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer equipment in the world.

The Mark THE E. LONG MANUFACTURING Co. SAW MILL MACHINERY ORILLIA, CANADA *of Quality*

Turn Your Waste into Good Money

"Long" Lath Machines and Bolters are the last word in design for machines of this type.

They are easy and safe to operate, and will ***stand up*** under the hardest usage.

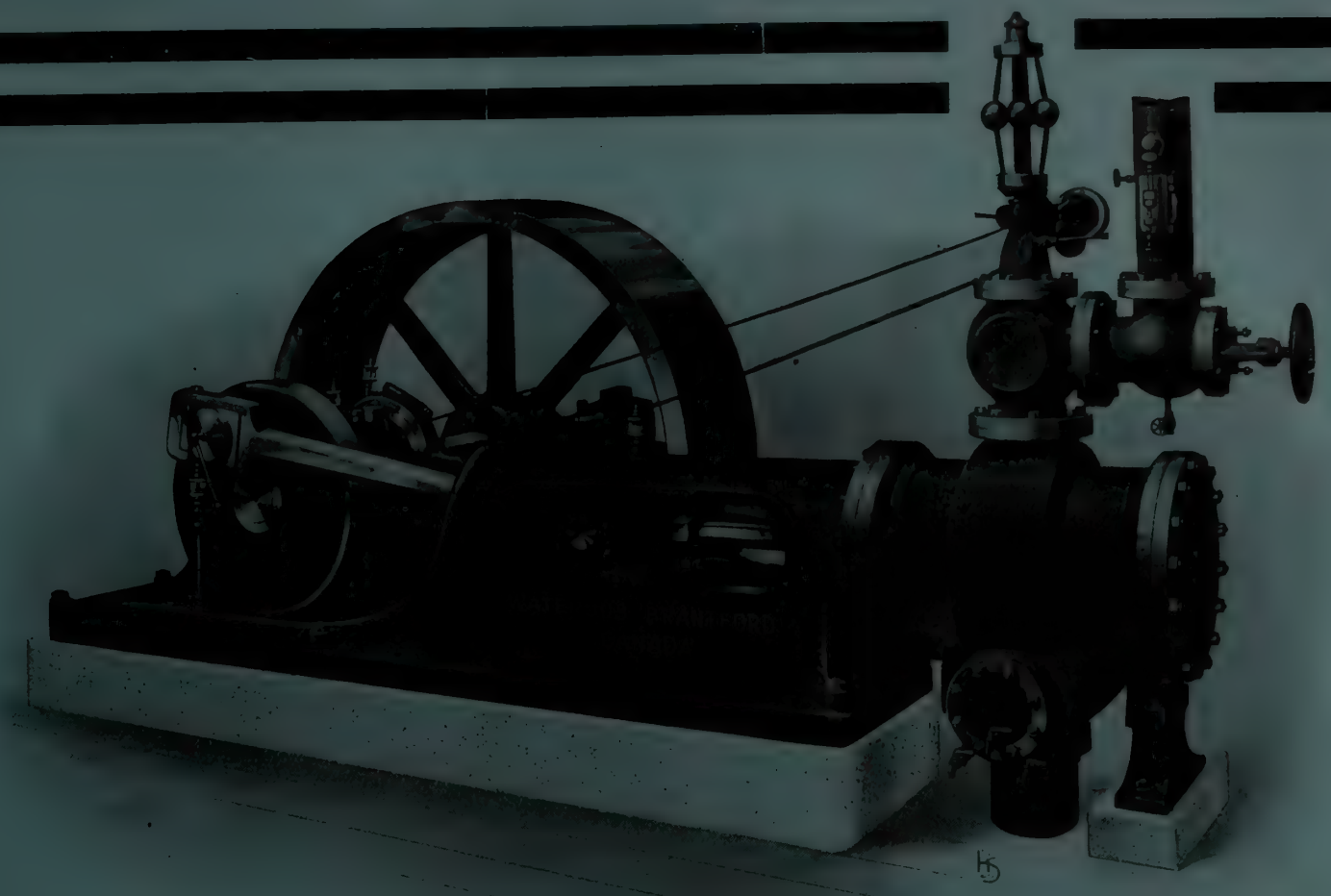
The machines shown on this page are our No. 2, and they will handle the slabs from a mill with a capacity up to 35,000 feet per day.

We also build larger and smaller sizes.

Get Catalogue No. 102.

The E. Long Mfg. Co.
Orillia, Canada Limited

AGENCIES:
MONTREAL—Williams & Wilson, Ltd.
WINNIPEG—Stuart Machinery Co., Ltd.
EDMONTON & CALGARY—Gorman, Clancey & Grindley, Ltd.
VANCOUVER—Robt. Hamilton & Co.



Waterous SAW MILL Engines

¶ They are *built* for the work.

¶ Strong and simple and on the job every minute.

¶ There is nothing to get out of order.

¶ Parts are few—materials are the very best—workmanship, highest grade throughout.

¶ An occasional wipe down and a dose of oil on the wearing surfaces will keep them running right along without a hitch.

¶ If you want an engine that will give you perfect service, that you can rely on at all times, that will save coal and cusses when the going is hard—write us.

¶ *They're built in sizes up to 600 H. P.*

As a Sample of Construction

—look at this crank bearing.

Notice the two quarter boxes one on each side with the lifting wedges adjusted through the heavy cap.
All these parts are machined, and are iron on iron bearing full length of the box.
A bearing like this makes shaft adjustment easy and a shift in alignment impossible.
It's typical of the whole engine. Get the other details—Bulletin 501.

The Waterous Engine Works Co., Limited, BRANTFORD, CANADA

"FROST KING" METAL

$5,000,000.00

worth of mixed metal sold annually.

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. Price 30c per lb., Fort William and East; West of Fort William 35c per lb., delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, 40c per lb.; West of Fort William, 45c, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

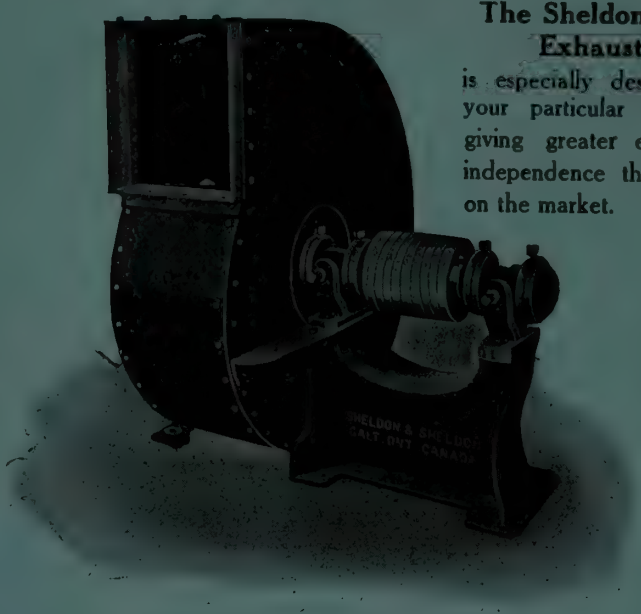
HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

Planing Mill Improvements

Every Manufacturer in the Lumber Industry realizes that to be "up-to-date" their Factory should be installed with **Shaving Exhaust Fans.**



The Sheldon Shaving Exhaust Fan

is especially designed to suit your particular requirements, giving greater efficiency and independence than any other on the market.

See our New Catalogue

Sheldons Limited - Galt, Ontario

Toronto Office, 609 Kent Building

AGENTS:

Messrs. Ross & Greig, 412 St. James St. Montreal, Que. Messrs. Walker's Limited, 259-261 Stanley St. Winnipeg, Man.

Messrs. Gorman, Clancey & Grindley, Ltd., Calgary and Edmonton, Alta.

Messrs. Robt. Hamilton & Co. Ltd., Bank of Ottawa Bldg., Vancouver, B.C.

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co. Limited

General Mill Supplies MONTREAL

Your Lumber Jack Will Do Better Work

if he sleeps on a clean, comfortable bed.

The Alaska Double Deck Bunks

are clean, comfortable, cheap and everlasting.

Write for prices.

The Alaska Feather & Down Co., Limited, Montreal

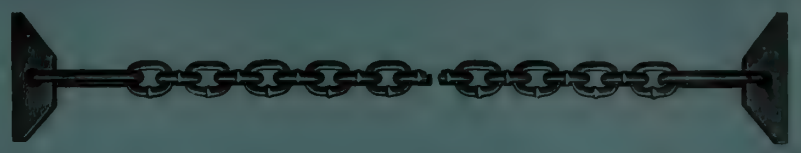
Largest manufacturers of Beds and Bedding in the British Empire.

Canada Lumberman & Wood Worker

WATER WHEELS
GOVERNORS, PUMPS

Highest quality

Boving Hydraulic & Engineering Co.
LINDSAY, ONT. Limited



Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.

You can dry and cure lumber better in three weeks by using

Canadian Dry Kiln Apparatus
with Humidity Control

than if it were air dried for 2 years. And your lumber will not warp or check, or be subject to severe expansion and contraction.

Write Dept. 17 for further particulars.

Canadian Blower and Forge Co., Limited
BERLIN, ONTARIO
St John Montreal Toronto Winnipeg Vancouver

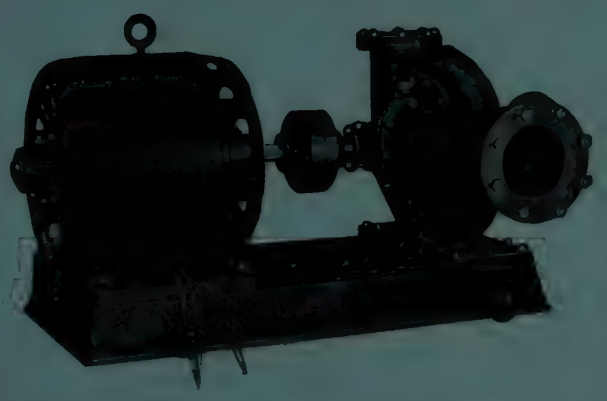
GENUINE "TURBROS"

Balata Belting

Waterproof and Stretchless.
The best belt for sawmills.

Manufactured and guaranteed by

Turner Bros. Canada Limited
Montreal



Pump Troubles

If you are not getting the results you want, let us know the conditions and requirements.

We Can Help You

The Smart-Turner Machine Co., Limited, - Hamilton, Canada

Keeping Tab on Lumber

The illustration was made from an actual photo of a Morrison Measuring Register in operation on a planer. It gives an accurate account of the amount of lumber passing through the machine. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

WRITE FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertisers, Page 64 Classified Directory to Advertisements, Page 52

A Word About The Hides Used In "AMPHIBIA" Waterproof Leather Belting

Even before tanning there is a big difference in hides—particularly in their tensile strength. The hides used in "AMPHIBIA" belting are obtained from the best stock at a season when the hides are toughest. They are carefully tanned in our own tanneries by a secret waterproof process which renders the leather absolutely impervious to oil, steam, water or fumes.

The best of the butts is then selected for use in "AMPHIBIA" belting, any weak or thin spots having been culled out by experts.

Every stage of manufacture is carefully supervised and every precaution taken to make "AMPHIBIA" the best leather belting on the market.

"Leather like gold has no substitute."

Write us for sample order stating where belt is to run.

"Made in Canada"

"AMPHIBIA"

Sadler & Haworth

Tanners and Manufacturers

For 39 Years Tanners and Manufacturers of the Best Leather Belts

MONTREAL
511 William St.

TORONTO
38 Wellington St. E.

WINNIPEG
Gal Building

ST. JOHN
149 Prince William St.

VANCOUVER
107-111 Water St.

"AMPHIBIA"

Red and White Pine Lumber

Red and White Pine Lumber

The Fire Did Not Destroy Our Small Mill or Planing Mill

WE HAVE A LARGE STOCK OF

Red and White Pine Lumber

Dimension Timber, Deals, Etc.

In all Sizes and Grades

Dressing Done on Short Notice

SEND US YOUR INQUIRIES

Geo. Gordon & Company

CACHE BAY, ONTARIO Limited

Mason, Gordon & Co. 80 St. Francois Xavier Street, Montreal, Que.

Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - Western Office:—Pacific Building, VANCOUVER, B. C.

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock— heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont.

JOHN DONOGH & CO.

Wholesale Dealers
Are looking for buyers
—Special—
1 x 4 & 5 White Pine common and dressing 1913 cut

Dry Hemlock and Spruce all sizes

1205 TRADERS BANK BUILDING, TORONTO

We offer to the wholesale trade the following lumber all in good shipping condition, 1915 manufacture, the full product of good logs :—

1 block, 600,000 ft.	Mill Run White Pine
1 block, 300,000 ft.	Mill Run Norway
1 block, 75,000 ft.	White Pine Waney Strips
1 block, 100,000 ft.	Norway Culls
1 block, 350,000 ft.	1"-No. 2 White Pine Culls

Specifications and prices on application.

P. & J. SHANNON

Lumber Manufacturers
BISCOTASING, ONT.

MILL RUN SPRUCE

30 M. 2 x 4 — 10/16 ft.
38 M. 1 x 4 — 10/16 ft.
44 M. 1 x 6 — 10/16 ft.
20 M. 1 x 8 — 10/16 ft.
3 cars 1½ x ⅜ — 4 ft. Spruce Lath, M. R.
3 cars 1 x 4 up No. 1 Common and Better Elm.

Spruce and White Oak Piles on hand for Immediate Shipment, 25 to 50 ft.

ARTHUR N. DUDLEY

Lumber, Lath and Shingles
109 Stair Building, Toronto Phone M. 6368

JOHN GILLIES, President — DAVID GILLIES, Vice-President — J. S. GILLIES, Sec-Treas.

Established 1873

GILLIES BROS.

Limited

Mills and Head Office BRAESIDE, ONT.

Manufacturers of

WHITE PINE

RED PINE **SPRUCE**

New York City: Guy E. Robinson, 1123 Broadway

Ammunition Boxes

100,000 ft. 1 x 4 10/16 No. 1 Spruce
50,000 ft. 1 x 5 " "
30,000 ft. 1 x 6 " "
150,000 ft. 1 x 8¼ and up No. 1 Com. Birch

Hemlock

400,000 ft. No. 1. Hemlock Cache Bay Bone dry
2,000,000 ft. " Longford 1915 Cut

Send us your inquiries.

The Long Lumber Company

HAMILTON, ONT.

"Beat It"

If it is Hocken's Hemlock you can't

You simply can't beat the unvarying good quality of Hocken's Hemlock. We can make any size shipment—promptly.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

BARTRAM BROTHERS, LIMITED

OTTAWA, CANADA

Spruce - Red Pine - White Pine

Large stock dry 1" and 2"

Have large stock 3" Spruce Deals for export trade at water points and can make delivery.

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

The Lumberman's Milk

KLIM

(SPELL IT BACKWARDS)

In Powder Form

Klim is pure—cheaper than fresh liquid milk. One third the cost of condensed milk. No freights on useless water—keeps in any temperature—no waste.

Packed for camp use especially in 10 pound tins $2.00 each, the pound makes one gallon. Case lots, special price.

Write for samples, etc.

Canadian Milk Products Ltd., Toronto

Plants:—Belmont, Ont., Brownsville, Ont. **Head Office:—Mail Building**

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

Machinery and Timber For Sale

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the Town of Parry Sound, Ont.; and other Lumber Equipment, including boom chains, plows, sleighs, etc.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Automatic Machine for circular saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Wood Machine for 16-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

Also, contents of machine shop, containing Planer, Drill, Lathe and Machinery, with tools necessary for repair work.

All of the above open for inspection at Parry Sound.

The **Parry Sound Lumber Co.** Limited

26 Ernest Avenue, TORONTO, CANADA

Why Does an Automobile Dealer Prefer to Sell a Nationally Advertised Car?

First—Because such a car must be all that is claimed for it. This is the day of Truth in advertising.

Second—Because through advertising and a sustained reputation for merit, the nationally advertised car is well and favorably known.

Third—Being thus known the dealer need not lose valuable time in educating his customer. The customer already knows a good deal about such a car, having developed an interest in it beside the library lamp, in the quiet of his home.

HOW DOES THE CAP FIT YOU, MR. LUMBER DEALER?

ARKANSAS SOFT PINE

is nationally advertised. Your customers are being told the truth about its merits and uses in the quiet of ***their*** homes. It ***also,*** is well and favorably known.

The home owner present and future, is reading facts about *ARKANSAS SOFT PINE* interior trim in your town every month.
(*See October issues of Country Life in America, Countryside, Craftsman, House and Garden, House Beautiful and Keith's Magazine.*)

We are informing your carpenter and contractor friends through ***their*** trade papers that *ARKANSAS SOFT PINE* is a splendid wood for their work—and why.
(*See October issues of Building Age and National Builder.*)

FIVE THOUSAND LEADING ARCHITECTS are being told of the posibilities of Arkansas Soft Pine as a base for White Enameled or stained woodwork.
(*See American Architect for September 22nd and Architectural Record for October.*

Get Ready for the Demand

Quotations by wire or letter from any of the following:

Arkansas Land & Lumber Company,	Malvern, Ark.
Arkansas Lumber Company,	Warren, Ark.
Cotton Belt Lumber Company,	Bearden, Ark.
Crossett Lumber Company,	Crossett, Ark.
Eagle Lumber Company,	Eagle Mills, Ark.
Edgar Lumber Company,	Wesson, Ark.
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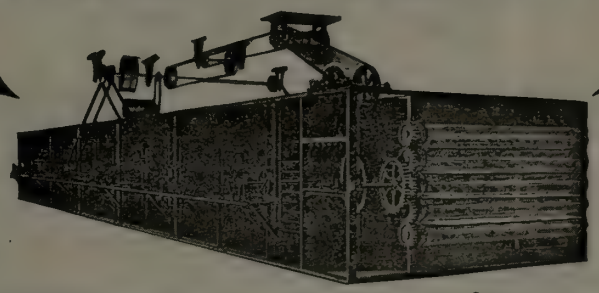

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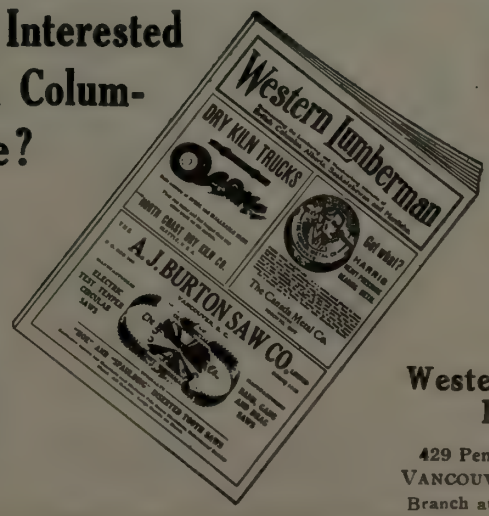

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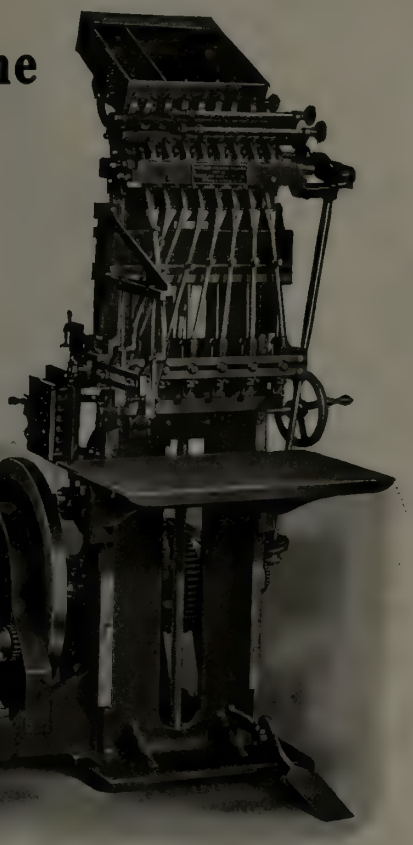

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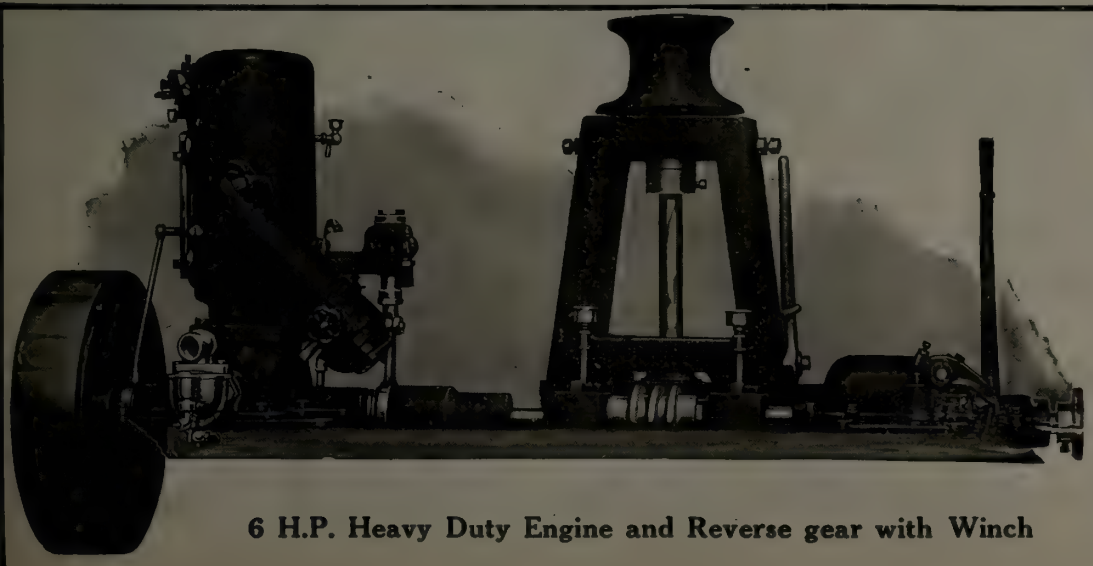

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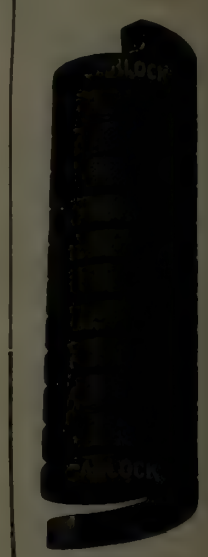
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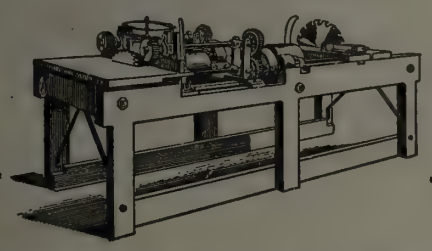

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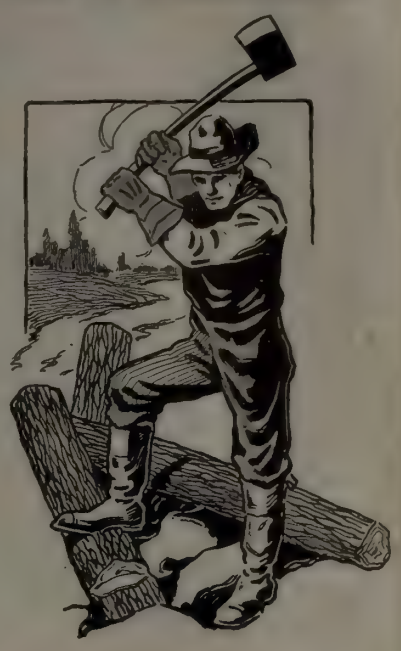

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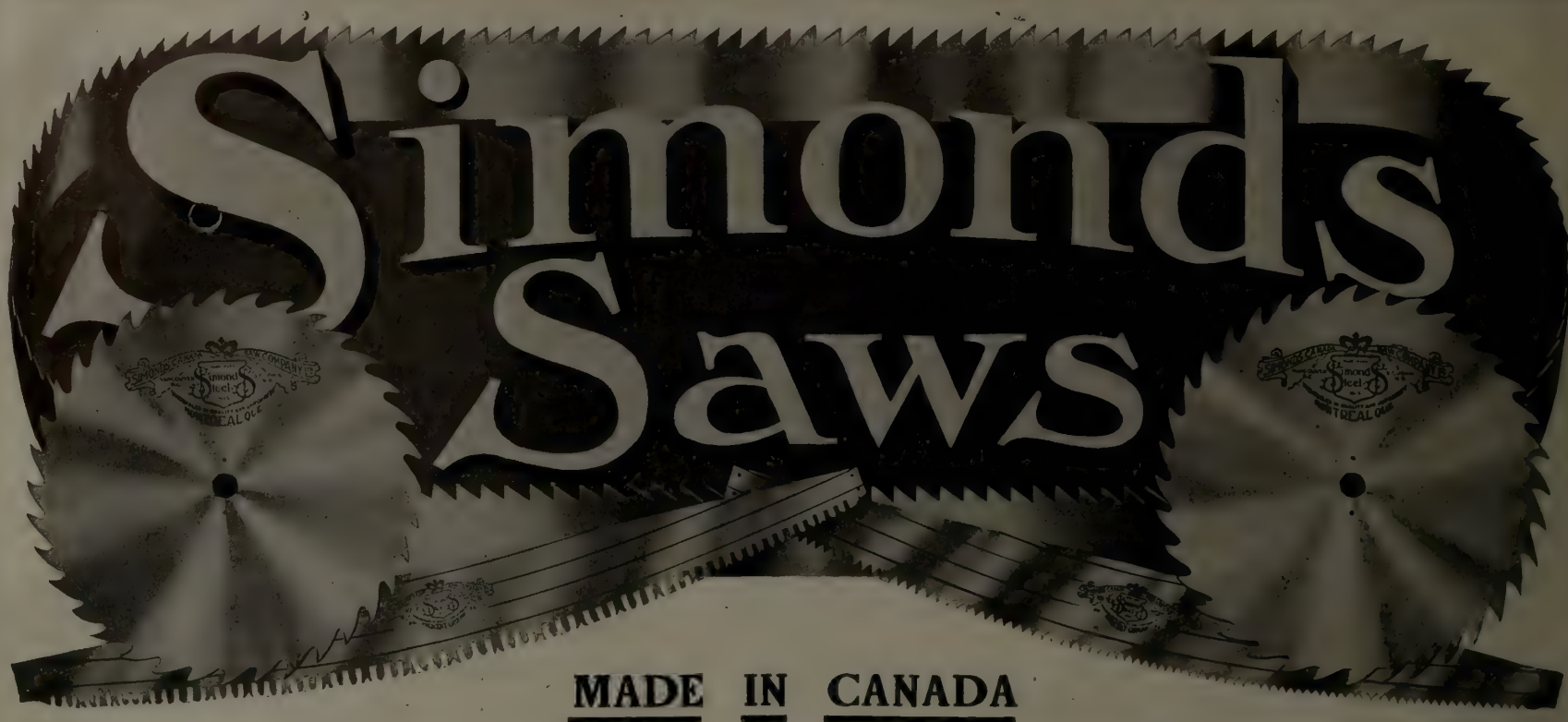

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Canada Lumberman & Wood Worker

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Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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Developing Opportunities in Great Britain

The reports which we have been publishing during the past few months, from Mr. H. R. MacMillan, Special Trade Commissioner for Canada, in regard to the markets for Canadian timber and lumber in Great Britain and also in France and Belgium, are of definite and practical value to Canadian Lumbermen. These reports, which are appearing in the Weekly Bulletin of the Department of Trade and Commerce, are an excellent example of the manner in which the Government can co-operate with the industries of the country in developing export trade. Our readers should not lose the opportunity of studying these reports carefully. In many cases they will be found to contain specific information of definite value, while in every case, even though they may not deal with subjects of immediate interest to the particular reader, they give such an excellent idea of conditions existing abroad that, as an education to the lumbermen of Canada, their value cannot be over-estimated.

One of these reports, appearing in the present issue of the Canada Lumberman deals in an exhaustive manner with the trade in Douglas fir, showing that it has now obtained a good foothold in Great Britain, but that, for its future development it will be necessary to follow up the advantages which have already been gained, and to adopt methods of trade which have been worked out by exporters from other countries, notably the pitchpine exporters of the Southern Atlantic States. Mr. MacMillan lays strong emphasis upon this point, showing that the pitchpine exporters have been able to secure a wonderful hold upon the trade, partly because of their ability to make quick delivery in small parcels, and also, to a great extent, because of their effective methods of promoting trade once they have secured a foothold. So successful have they been in this regard, that the producers of Douglas fir now find, in spite of the superiority of their product for many of the uses to which pitchpine is put, that they have to meet a wide-spread prejudice in favor of pitchpine. It will be necessary to work out and carry on in Great Britain, for a long time to come, a policy of educating the consumer, the architect, the engineer and the contractor in order to overcome the prejudice referred to. That Douglas fir has been able to secure a foothold of late years, in the face of this prejudice, is clear proof that it will be able to hold its position if aggressive trade methods are adopted, and that it will be able to increase its hold if the suggestions given by Mr. MacMillan regarding trade development are followed out. All the more so will this be the case, because of the increasing cost of pitchpine and the decreasing percentage of high grade pitchpine stocks. Nevertheless the well-known aggressiveness of the pitchpine exporters may be counted upon to put off, for many years, the successful exploitation of the market for Douglas fir in Great Britain, unless Canadian manufacturers and exporters go after the business according to the known business methods which have been successful.

Everything which applies in this connection to the case of Douglas fir, applies with practically equal force to the trade in other Canadian timber and lumber products. During the past month there has been a great deal of interest taken in Canada in regard to the possibility of securing a good share of such business as will develop in portable houses for Belgium and Northern France, and possibly also in those parts of Russia which have been devastated by the war. Such enquiry and activity as have developed out of a reported order for a large quantity of these houses, which was supposed to have been secured by a Brooklyn, N. Y., firm, have brought to light a great deal of valuable information. In the first place we now know that no such order has been given, or has been under consideration. In addition to this we know how keenly our competitors in the United States are preparing to secure this business when it comes out. Canadians cannot afford to leave any single stone unturned in this matter. There will certainly be most important business to come out of this and we should have a large share of it, as we are able to furnish the materials at attractive prices. We have seen however, that the manufacturers of the United States are doing all they can to get the business also. It is known for instance that a large United States manufacturer of portable houses lost no time after the reported order, in sending two of his most efficient men to France to look into the situation. On a mere rumor this company undertook a heavy expense, foreseeing that even if the rumor were incorrect, the business was on the boards, and would be secured, one of these days, by the parties who were best prepared and who pushed their case most effectively. Those in Canada who are anxious to share in such business must act in the same way. We know pretty definitely where the orders will come from. We have a natural preference in the allied markets, and we will have ourselves to blame if good men are not employed to camp upon the spot and to be ever ready with the exact information that is required; prepared to give this information at a moment's notice, and to make and eccept contracts without delay.

Credit Information—The Key to Success

Every branch of the lumbering industry and trade to-day is more seriously interested in matters of credits and collections than it has ever been in the past. Probably in no other department of a firm's business is there greater possibility for success or ruin, than in that which has charge of the granting of credit and the collecting of amounts due for goods delivered. So certain is this, and so widely is it recognized, that we often wonder how it comes about that firms who will discuss it with us at length, and agree with us regarding it so completely, will, at the same time, fail to take advantage of those simple methods of doing their credit and collection business systematically that have been tested by time and proved effective. While we have no desire to appear in the garb of a preacher, telling our readers all the time what they ought to do, we do feel at times like the present that we are justified, and to a considerable extent obliged. to lay before them some of those ways in which they may look after

these matters more effectively. It is easy to tell someone else how to run his business. We suppose there are a lot of our readers who would like to tell us how to edit a lumber trade paper; and probably one of the first things they would tell us would be not to say so much about credits and collections. However, that is neither here nor there; what we have to say about this matter is the result of considerable experience, as it has been given to us by firms that have made the most of their opportunities and have climbed well up the ladder of success.

The object of granting "credit," as we see it, is to induce a party who is certain to pay for what he buys, to bring his trade to you. If this is a wrong conception of "credit" we would like to hear from someone who will set us right. There are some people however, who have an idea that "credit" is a lever by means of which to take a customer away from a competitor, with little or no consideration of whether the customer is likely to pay for what he gets. Whenever credit is given to a man it should be with the definite knowledge that he is—taking everything into consideration—likely to pay within a reasonable time. If a dealer has no definite assurance of this, he ought not to touch the account. We do not believe that, taking it by and large, he will lose money by such a course.

How is a dealer to know about a man when he comes to him for the first time? There are many ways of getting information in advance. The man who is fore-armed with information as to a customer's financial responsibility, is the one who makes the biggest success. In addition to having a staff employed in buying goods and selling them, any lumberman, who expects to do well, must have someone devoting time to securing and keeping up-to-date every available piece of information about customers. In a small town or country district it is possible to gather such information systematically from one's competitors, if they are not hide-bound ald fogies, or sworn enemies; also from banks, registry offices, friends, and from personal observation. Such information should be systematically filed away on a card system, or its equivalent, so as to be available at any time. Then, when a new customer, or an old one comes in, the dealer is able to decide, on the spot, whether he will sell him for cash or will give him credit, and upon what terms credit should be given. In larger cities, co-operation among dealers is the best solution of the problem. There are no mysteries about it whatever. It is a matter of common sense. Dealers who, in the old days, used to enjoy the thought of their competitors falling into a trap, are today looking at things from another angle. It is possible to work together in harmony, no matter how keenly you may be competing for trade, and to exchange information either personal or through a bureau and thereby to secure information of inestimable value. Without such information, one cannot hope to make headway against the thousand and one individuals who think that their end of a bargain is completed when they have secured your goods, and that they may pay just when they please, or not at all, if it so suits them. The idea of the credit bureau, and of the systematic gathering and filing of credit information, is growing rapidly. We expect, in the course of a few years, to find that, in the retail branch of the lumber business in Canada, it has become one of the greatest factors for good that the trade has ever adopted. The same methods moreover, can be worked out in other branches of the trade to a greater or less extent, and one of these days we hope that wholesalers, for instance, will follow the lead which retailers in many parts of the country have already given them.

Official Estimate Shows Record Canadian Crops

In a bulletin issued on Sept. 13th the Census and Statistics Office, Ottawa, publishes its annual preliminary estimate of the production in Canada of the principal grain crops (wheat, oats, rye, barley and flaxseed), as well as a report on the condition of all field crops at the end of August.

The preliminary estimate of this year's wheat crop in Canada is a total of 308,839,800 bushels from 12,986,400 acres, representing an average yield per acre of 23.78 bushels. This total is 147,559,800 bushels, or 91 per cent. in excess of last year's inferior yield of 161,280,000 bushels, 77,122,800 bushels, or 33 per cent., in excess of the previous highest yield of 231,717,000 bushels in 1913, and 112,814,000 bushels, or 58 per cent., in excess of the annual average yield of 196,026,000 bushels for the five years 1910 to 1914. In acreage, average yield per acre and in total yield the present estimate is the highest on record for Canada. Of oats the total yield for 1915 is estimated at 488 million bushels from 11,365,000 acres, an average yield per acre of 42.94 bushels, the figures of yield also constituting records never previously attained for the Canadian oat crop. Barley is placed at 51,655,000 bushels from 1,509,350 acres, an average per acre of 34.22 bushels. Rye yields 2,385,700 bushels from 112,300 acres, or 21.24 bushels per acre, and flaxseed 12,199,600 bushels from 1,009,600 acres, or 12.08 bushels per acre.

The estimated total production of wheat in the three Northwest provinces (Manitoba, Saskatchewan and Alberta), is 275,772,200 bushels as compared with 140,958,000 bushels last year. In Manitoba the total is 77,514,200 bushels, as compared with 38,605,000 bushels, in Saskatchewan 155,233,000 bushels against 73,494,000 bushels and in Alberta 43,025,000 bushels against 28,859,000 bushels. Oats yield 301,051,000 bushels in the three provinces as compared with 150,843,000 bushels last year, barley 33,303,000 bushels against 19,535,000 bushels, rye 657,000 bushels against 514,303,000 bushels and flaxseed 12,118,000 bushels against 7,083,000 bushels.

It should be noted that the foregoing preliminary estimates of yield are compiled from the reports of correspondents whose judgment, based largely upon the luxuriant appearance of the crops in the field, may possibly not be sustained by the final actual returns from the threshing machine. Revised estimates of yield will be published in October and final estimates after the completion of threshing at the end of the year.

A notable feature of the past growing season has been the steady maintenance from month to month of high figures indicating condition. From May 31 to August 31 the figures for wheat, oats barley and rye have been maintained at over 90 per cent. of the standard representing a full crop. For the whole of Canada the figures of condition at August 31 also exceeded 90 per cent. for mixed grains; they were between 80 and 90 per cent. for peas, beans, buckwheat, flaxseed and root and fodder crops and were below 80 per cent. only for corn for husking (79) and hay and clover (71). Conditions for harvesting in the west were described by correspondents as generally favourable during August. Towards the end of the month severe frosts did some injury, but fortunately they came too late to cause widespread damage to grain. In the Maritime provinces and in other parts of Eastern Canada excessive rains delayed ripening or interfered seriously with the ingathering of hay and grain.

Canada's trade with the United States for the three months ending with June, 1915, showed an increase, according to the latest available statistics, of $34,746,172 over the corresponding period of 1914. Imports from the United States had a value for the quarter under review of $71,840,407, or $12,319,287 less than in April-June of the preceding year; but the gain in exports from the Dominion to the neighboring Republic (the value rising from $41,642,980 to $88,708,439) was sufficient to offset this decline and give a net increase, as stated, of $34,746,172. From all countries Canada imported goods to the value of $99,794,976 in the three months ended June last ($128,843,347 worth in the second quarter of 1914), and exported to all destinations $172,851,892 ($84,265,048 in 1914). During the same period the trade of the port of St. John totaled: Imports, $2,041,025 ($2,493,364 in April-June, 1914); exports, $24,455,626 ($5,661,320 in the corresponding quarter of last year).

Reports from St. John, N. B., state that the spruce bud worm is very active throughout the province, especially along the Miramichi, Canaan, Salmon and Kennebeccasis rivers.

Douglas Fir Markets in Great Britain

Opportunity Apparently Waiting for Canadian Exporters to Secure a Much Larger Share of Trade—Pitchpine Competition—Prejudice to be Overcome

The Weekly Bulletin of the Department of Trade and Commerce, for September 20th, contains the following report upon the market for Douglas fir lumber in Great Britain, written by Mr. H. R. MacMillan, Special Trade Commissioner:—

So far as the United Kingdom market is concerned there are two problems of interest to Canadian shippers of Douglas fir:—

1. The probability of an increase in the use of this wood in the United Kingdom.

2. The means to be adopted to increase the proportion of Canadian Douglas fir from the 15.9 per cent. of 1914 to a more creditable showing.

The amount of timber used each year in the United Kingdom does not appear from the customs statistics to be increasing rapidly. The importations for five years are given below for the chief classes of construction timber:—

	1910 Loads	1911 Loads	1912 Loads	1913 Loads	1914 Loads
Hewn fir, pine, spruce	544,059	506,617	578,356	528,958	364,030
Sawn or split, planed or dressed fir	5,839,269	5,382,643	5,574,832	6,451,023	4,725,407
Total	6,383,328	5,889,260	6,153,188	6,979,981	5,089,437

The rapid growth of timber consumption, which in other countries holds promise of affording relief for the over-production of lumber in Western Canada does not exist in Great Britain. Any increase in use of Douglas fir will therefore follow only on the displacing of some other wood.

On the other hand adequate measures to produce timber in Great Britain are not being taken, although the waste areas of the country, estimated at nine million acres suitable for timber growing, might, as in European countries, be devoted to the production of timber to the exclusion of at least three-fifths of the present volume of imports and the consequent narrowing of the market. Therefore there is not likely to be a diminution of imports, except during periods of trade depression.

Conditions Governing the Import of Douglas Fir

The extent to which Douglas fir will displace its competitors will depend upon several well defined conditions:—

1. The price of Douglas fir for heavy construction work as compared with the price of American pitchpine.

2. The price of Douglas fir for cheaper work as compared with the price of European timber, chiefly Swedish, Norwegian and Russion sawn lumber, which is imported annually to the value of $150,000,000.

3. The still existing ignorance concerning the properties and uses of Douglas fir, which in some quarters amounts to prejudice.

4. The inadequate liner service to Great Britain from Douglas fir ports as compared with the liner service from pitchpine ports.

5. The comparatively small quantities of wood used for interior finish and the many varieties of high-class timber on the market.

Pitchpine Compared with Douglas Fir

Pitchpine is the timber now used in Great Britain for those purposes for which Douglas fir is used in Western Canada. It is the wood upon which the British purchasers have relied for nearly all timbers in sizes over 3 inches x 9 inches. It is also used for joists, studding, flooring, joinery, interior finish, car building, fittings of public buildings, cheap furniture, and large quantities are consumed in various manufactures. An attempt to extend the use or sale of Douglas fir brings it into immediate competition with pitchpine, which is thoroughly well known, while Douglas fir is not so well known, although the latter is recognized as superior to pitchpine. Douglas fir sales must be governed, with two exceptions, by the extent to which it may be sold at pitchpine prices. The exceptions are in wide clears and timbers (or logs as they are called in England) over 16 inch x 16 inch x 40 feet, neither of which are produced in pitchpine, and for which Douglas fir shippers control the price.

Imports of Pitchpine

There are about 150,000,000 feet of pitchpine imported into Great Britain yearly. A large part comes in the form of logs 10 inch by x 10 inch and up, averaging 30 to 32 cu. ft. contents each, solid measurement. The largest logs in such a shipment are about 16 x 16 inch x 30 feet to 40 feet, although there are few of them. These logs before the war averaged 65 shillings per load in price, or about $26 per thousand feet. Smaller logs 6 inch x 6 inch to 9 inch x 9 inch are imported at an average of 50s. per load or $20 per thousand. Large quantities of the logs 6 inch x 6 inch to 9 inch x 9 inch are used in the mining districts.

While a large proportion of the logs are imported to be used in construction works without further re-sawing, many are also sold to timber merchants operating sawmills, who carry the logs in stock and re-saw them to the order of customers. It was formerly the custom of merchants to buy all or nearly all their pitchpine requirements in the logs, sort the logs and re-saw them for decking, clears for flooring and joinery and planks. In recent years, however, merchants have been abandoning this practice and have instead imported much of the pitchpine as sawn lumber in the grades established by the shippers.

Prime Pitchpine

Prime pitchpine, a clear grade, is extensively used for church and chapel decoration and finish, pews, stairs, balusters, office counters, flooring, ceiling and general joinery work. It is imported in 1-inch x 7 inch, 1 inch x 9 inch, 10 feet to 20 feet long, 2 inch-3 inch x 9 inch -11 inch, 16 feet to 30 feet long, 1 inch x 6 inch to 1½ inch x 6 inch, 1½ inch x 8 inch-9 inch, averaging 20 feet long, at c.i.f. prices varying from £16 to £18, usually averaging £17 10s. per standard, or $42.15 per thousand. Larger sizes 3 inch-6 inch x 9 inch-16 inch x 12 feet-24 feet, used for re-manufacturing into interior finish and for industrial purposes, cost £19-20 per standard, or about $45.60 per thousand. This lumber is imported rough, and is remanufactured to suit the particular requirements of the customer.

Edge Grained Pitchpine

Edge grained pitchpine flooring is handled in small quantities. There is small demand for any special flooring stock, and an even smaller demand for edge grained material. Edge grained pitchpine is usually cut 1¼ inch x 6 inch, averaging about 16 feet in length, and sells c.i.f. for £28 per standard, or $67.20 per thousand feet.

Pitchpine Kiln Dried Saps

Large quantities of pitchpine kiln dried saps are imported. This timber is usually 1 inch x 4 inch, 1 inch x 6 inch, 1 inch x 7 inch, chiefly the smaller sizes, 12 feet to 20 feet in length, and costs about £12 per standard, or $28.80 per thousand. Kiln dried saps are used in large quantities for school furniture, tramway seats, linings and fittings, wooden beds and similar articles.

Lower Grades of Pitchpine

The lower grades of pitchpine, used in rough construction, for the purposes to which Douglas fir would be adapted, are imported at very low prices. The following prices, which ruled early in 1914, may be taken as an indication of the prices which must be met:—

Grade	Per Standard £	s.	d.	Per M feet
6-in. x 12-in. timbers..	£12	10	0	$30 00
3-in. x 9-in. Rio prime	5	12	0	28 80
3-in. x 9-in. merchantable	10	10	0	25 20
Square edged and sound boards ...	9	0	0	21 60

These prices, of course, fluctuate greatly and differ slightly in various ports.

When freight rates become normal again and are adjusted on the basis of using the Panama canal, Douglas fir shippers will undoubtedly be able to compete successfully with pitchpine logs, and to a growing extent with the deals and boards. Pitchpine prices will be continually increasing, and each year will see the prospects for successful competition growing better.

Other Uses of Pitchpine

Only the most important uses of pitchpine have been named. The railway companies use large quantities in their building and construction departments, and there are also to be taken into consideration the many thousands of factories continually using this wood in the upkeep of particular equipment, or as a raw material in turning out manufactured articles. The factories and railway companies who, as well as the builders, buy from the timber merchants, are accustomed to the use of pitchpine in the grades and at the prices named above, and will be led to the use of Douglas fir only as it is

offered to them by the importers at prices lower than those ruling for pitchpine.

Douglas Fir Contrasted with European Timber

Though "stumpage" in the countries of Norway, Sweden, and Russia is much more valuable than in Canada, and though in certain districts the forests now being exploited are at some distance from salt water, there are still very great quantities of timber available, and low price of labour, 75 cents to $1 per day for eleven hours' work, combined with the low freight rate, which is 20s. to 25s. per standard from Sweden, or $4.80 to $6 per thousand, enables the European timber exporting countries to supply Great Britain with wood at very low prices.

Spruce and Red Pine

The British have used the spruce and red pine for so long that they are thoroughly familiar with and satisfied with the defects of the wood. They have developed a system of finishing their buildings, which enables them to use timber provided it is sound, regardless of the number of knots, it may contain. Although the British insist upon the very best of clear timber and the highest grades obtainable for certain industrial uses in ship and car building and in some public buildings and expensive private dwellings, practically no clear or select timber is used in over ninety-five per cent. of the buildings of the country. In the ordinary British house, store or office all woodwork is heavily covered with paint and the floor is a mass of knots. The builder, the owner and the tenant are satisfied with this class of timber and do not want a better grade unless it can be offered at a lower price.

Whitewood and Redwood

The whitewood (spruce similar to Canadian spruce) and redwood (pine somewhat similar to Canadian red pine) imported into Great Britain are manufactured in many different sizes and grades. The sizes commonly carried in stock are:—

1 inch and 1¼ inch by 3 inch, 3½ inch, 4 inch, 4½ inch, 5 inch 5½ inch, 6 inch, 7 inch, 8 inch, 9 inch, 11 inch; 1½ inch and 2 inch by 3 inch, 3½ inch, 4 inch, 4½ inch, 5 inch, 5½ inch, 6 inch, 7 inch, 8 inch, 9 inch, 11 inch; 2½ inch by 4 inch, 4½ inch, 5 inch, 6 inch, 7 inch, 8 inch, 9 inch, 10 inch, 11 inch, 12 inch; 3 inch by 3 inch, 4 inch, 4½ inch, 5 inch, 6 inch, 7 inch, 8 inch, 9 inch, 10 inch, 11 inch, 12 inch; 4 inch by 6 inch, 7 inch, 8 inch, 9 inch.

Sizes of Sawn Lumber

The sizes vary in different ports according to the regulations adopted by local municipal bodies governing the sizes of joists and other building timbers. Sizes are also affected by local custom. All lengths are odd and even from 6 to 26 feet. All sizes cut in European mills are perfectly accurate, even and uniform, a point concerning which the British purchaser severely criticizes Canadian and American lumber. The various sizes of sawn lumber are roughly classified in the British market under trade names.

Boards, less than 2 inches thick by 4 inches wide and up.
Battens, 2 inches by 6 inches to 8 inches.
Scantlings, 2 inches by 3 inches, 4 inches, 4½ inches, 5 inches, 5½ inches.
Deals, 2 and up by 9 and up.
Planks, larger than deals.
Balks, 4 inches by 4 inches to 8 inches by 8 inches.
Timbers, 9 inches by 9 inches and up.

Methods of Grades

These terms are used loosely and cannot be sharply defined. The methods of grading vary in the different Swedish, Norwegian and Russian ports. Even in the same ports or shipping districts different shippers have established individual interpretations of the grades. Each shipper marks every piece of lumber exported with his trade mark indicating the grade. The grades are not written or clearly defined and can be known only as the result of experience. The firsts from one port will be equal to the seconds or thirds from another and the firsts from a shipper in one port will sometimes average only a little better than the seconds from another shipper in the same port. This being the case the importers adjust their prices for the better grades in accordance with their past experience of the shipper and the port from which he ships.

(To be continued)

The formation of a selling organization in connection with a number of prominent B. C. coast mills, which we announced in our issue of September 15th, has been received by the lumber manufactures in the interior of British Columbia with much approval. It is felt that the improved trade conditions thus brought about upon the coast will immediately be reflected in connection with the interior trade. The pressure of competition from coast mills in the prairie markets will in this way be greatly reduced.

Hoo-Hoo Completes Reorganization

Annual Convention Appoints E. D. Tenant, of Winnipeg, Man., Business Manager and Adopts Radical Changes

Mr. E. D. Tenant, New Sec.-Treas. of Hoo-Hoo.

The Concatenated Order of Hoo-Hoo held their 24th annual convention in the Lumbermen's Building and House of Hoo-Hoo at the Panama Pacific International Exposition, at San Francisco on September 9th, 10th and 11th. The meeting was one of the most important and interesting that has ever been held by the Order and is expected to result in a better and stronger organization. During the past few years the Order has passed through severe trials, culminating in the financial irregularities which were disclosed last year, and leaving, as everyone in the Order knows, a deficit of about $9,000. When this situation was realized the Snark of the Universe, Mr. E. D. Tennant, of Winnipeg, Man., took executive charge of the affairs of the Order, remaining in charge throughout last winter and the summer of this year. Mr. Tennant undertook important reconstructive work, the result of which is that Hoo-Hoo is now entering upon a new era, during which many of the old members are confidently expected to return to the fold and assist in making the Order a greater agency for good in the lumber industry even than it has been in the past.

Strong men have been chosen to guide the Order during the coming year, the new officers being:—Snark of the Universe—Julius Seidel, St. Louis, Mo.; Senior Hoo-Hoo—W. P. Lockwood, Seattle, Wash.; Junior Hoo-Hoo—Junius H. Browne, San Francisco; Bojum—Jeff Webb, Detroit, Mich.; Scrivenoter—L. D. May, Jacksonville, Fla.; Jabberwock—Charles J. Kammer, Astoria, N. Y.; Custocatian—H. T. Kendall, Houston, Tex.; Arcanoper—F. H. Mitchell, Winnipeg, Man.; Gurdon—H. B. Huston, Omaha, Neb.

The plan of reconstruction for the Order is as follows:—Arrangements have been made for incorporating the Order; Dues have been increased to $3.65 per year, which will enable the deficit to be cleaned up and provide ample funds for future operation; A secretary-treasurer will be employed who will manage the Order's business and the office formerly filled by the Scrivenoter; The Scrivenoter's office will now be merely administrative and without salary. In connection with the reconstruction, it is of chief importance to note that Mr. E. D. Tennant, last year's Snark of the Universe, who supervised the initial work of reconstruction, is to be employed as secretary-treasurer of the Order.

In addition to the above changes, the new Supreme Nine is one of the strongest which the Order has ever had. Mr. Julius Seidel, the well-known St. Louis lumberman, head of the Julius Seidel Lumber Company, is an exceptionally happy choice for the position of Snark of the Universe during so critical a period of the Order's life.

The proceedings of the convention were presided over by the retiring Snark of the Universe, Mr. Emerson D. Tennant of Winnipeg, Man. In his annual address Mr. Tennant referred to the fact that he was the second Canadian to be honored with the highest office in the gift of the Order. The serious situation which had arisen in connection with the Scrivenoter's office, he said, had made it impossible to carry on the work of the Order and extend its usefulness, as had been the custom in previous years, but he believed that the trouble through which they had passed would enable them to realize that they had been drifting along and trusting too much to fraternal feelings in their business affairs. The Order was now in full possession of the facts regarding its financial position. Their experience had been costly, but they had learned a severe lesson which would assist them in steering a straight path in the future. There had been a complete and thorough clean-up in the business affairs of the Order, and its organization was now ready for constructive upbuilding support and guidance, which would steadily place it in its proper sphere in relation to the lumber industry.

What has been done to overcome the difficulties of the Order has already been explained in previous issues of the Canada Lumberman. The Snark, after referring to this work, said he believed that the financial report of the period during which he had had charge of the business affairs of the Order would prove satisfactory, especially when it was considered that on February 1st they were $16,000

in debt with only $700 on hand. The work of the Order had been carried on and the liabilities had been reduced to $9,000.

At the meeting on September 10th, a motion to appoint Mr. Tennant secretary-treasurer was unanimously carried. Mr. Tennant, in accepting the office, said that he thought he could best serve the Order by continuing and looking after its organization. It was therefore settled that he should devote his entire time to the Order, at the same salary as the Scrivenoter has been receiving. As secretary-treasurer, Mr. Tennant will be the business manager of Hoo-Hoo.

A motion was carried that, if there should be any delay in getting sufficient funds from the payment of dues for carrying on the immediate business of the Order, the Supreme Nine might issue bonds to members in blocks of from $10 to $100, or more as might be desired.

It was decided, without any opposing vote, that the 1916 annual should be held at Memphis, Tenn.

A resolution was carried asserting the advisability of establishing death benefits, and requiring that, as soon as the financial position of the Order warrants, a plan be evolved covering the entire membership of the Order.

On September 11th the annual meeting of the members of the Osirian Cloister was held. Matters of routine business were transacted and officers for the following year were chosen as follows:—High Priest of Osiris (chief priest)—Dan W. Richardson, Dover, N. C.; High Priest of Ptah—Alf. A. Rudy, Bluff City, Tenn.; High Priest of Ra—J. G. Robson, New Westminster, B. C.; High Priest of Isis—E. C. Robinson, Lowellville, Ohio; High Priest of Shu—Fred H. Gilman, Seattle, Wash.; High Priest of Thoth—E. D. Tennant, St. Louis, Mo.; High Priest of Hathor—R. Hendrickson, San Francisco; High Priest of Sed—Seth W. Morrison, Salt Lake City, Utah; High Priest of Anubis—J. F. Wilder, Hattiesburg, Miss.

The annual concatenation was held on Friday evening, September 10th. The annual banquet was held on Saturday evening, September 11th. and on Saturday afternoon, the members enjoyed a trip to Mount Tamalpais.

British Imports of Timber and Wood Pulp

The August number of the Anglo-Swedish Trade Journal publishes the following reports on the Swedish timber and wood pulp markets which appeared in the Skogsvardsforeningens Tidskrift for July. It will be seen that England is importing large quantities of both timber and wood pulp, a part of the latter, however, going to satisfy the requirements of numerous French mills. The article will doubtless be of interest to Canadian firms, who are closely following the various markets with a view to Canadian shipments of lumber and wood pulp abroad.

The timber market:—The market continues to be undisturbed. Sales are still made, and up to the time of writing (July 20) about 550,000 standards, more than half the annual production, have been sold. In comparison with previous years, this is undoubtedly a low figure, but if the result of sales is considered in conjunction with the extremely difficult conditions now prevailing, one must acknowledge that the result is better than what was expected.

England is still leading, but will only buy c. i. f. Holland and Denmark are are in the market, as well as France and Germany, but the transactions of these latter countries are not so important. The following prices have been recorded recently:—

From Upper Gulf—
England, c.i.f. 3 x 9 red o/s, £16 10s.—£16 15s.
7 in. red boards, o/s, £14 10s.—£14 15s.
2 x 4 red o/s, £14 10s.

From these prices, 75s.-90s. should be deducted for freight and insurance to ascertain the f.o.b. prices.

From Hernosand—

France, f.o.b.	3 x 9 red III	frcs.	325
	" IV	"	300
	" V	"	265
	1 x 4½ red o/s	"	225
	1 x 4 red o/s	"	215
	3 x 9 white o/s		42 c. basis
	white battens o/s	frcs.	250 - 255
Denmark,	7 in. red boards	M.	217.50-220

In regard to sales and shipments to England, the freight question comes into the foreground. Freights are still very high, with an alternate rise and fall. These fluctuations at present lie within a margin of about 5s. Although this fact is known when negotiations are made, it introduces a certain amount of uncertainty into bargaining, and in regard to the net profit. So far, there seems to be no likelihood of this uncertainty disappearing.

Shipments continue in spite of this, and the result exceeds expectations. By the end of June, 315,000 standards were shipped, against 340,000 standards during the same period of last year.

Geo. K. Tyler Honored by Former Associates

Geo. K. Tyler.

We are pleased to be able to publish herewith a portrait of Mr. Geo. K. Tyler who is well known to Ontario lumbermen as the former superintendent at the Meaford Ontario plant of the Seaman Kent Company. Recently Mr. Tyler was selected by Messrs. Knight Bros. Company Ltd., Burks Falls, Ont.. to fill a more responsible position than the one in which he was formerly engaged, and upon the occasion of his severing his connections with the Seaman Kent Company he was made the recipient of a handsome locket and chain as a token of the regard in which he was held by his former associates. The event took place in the I. O. F. Hall at Meaford and was in the nature of a farewell meeting. Mayor Kent of Meaford who is president of the Seaman Kent Company occupied the chair during the proceedings and expressed the appreciation which the company had for Mr. Tyler and tha excellent work which he had performed during his occupation of the position of superintendent. Expressions of appreciation were also delivered by Mr. Cole, sales manager, Mr. J. A. Sinclair, secretary-treasurer, and others of the staff. Mr. Tyler responded briefly expressing his pleasure in receiving such a token of friendship and also the regret which he felt in severing so many pleasant relations.

Death of S. H. Bowman

Mr. S. H. Bowman, president of the Revelstoke Saw Mills Company, Revelstoke, B. C., died recently at Minneapolis, Minn., at the age of 62. Mr. Bowman had not been in very good health of late, but his death came as a great surprise to his business associates.

The late Mr. Bowman was widely known both as a lumber manufacturer and retailer. His business acquaintance was extended throughout British Columbia, Alberta, Saskatchewan, Minneapolis and the Middle and Southern States. Until a few years ago Mr. Bowman was extensively interested in timber and lumber manufacturing in British Columbia, having been president of the Bowman Lumber Co. Ltd., the Revelstoke Saw Mill Co. Ltd., Revelstoke, and the Yale Columbia Lumber Co. Ltd., Nelson, B. C., companies which operated in all about 7 sawmills in the interior of British Columbia. During the past few years Mr. Bowman had taken a special interest in the retail lumber business in Alberta and Saskatchewan and occupied the position of president for the Revelstoke Saw Mill Company Ltd., the Atlas Lumber Co. Ltd., and the Globe Lumber Co. Ltd. These companies operate nearly 100 retail lumber yards in Alberta and Saskatchewan and have their head office in Calgary. Mr. Bowman is survived by his wife and one son Mr. S. H. Bowman Jr.

Reduction of French Duties on Paper and Pulp

The French Official Gazette has published the following Act dated August 14, 1915, which has been adopted by the Senate and the Chamber of Deputies, reducing the customs duty on paper intended for newspaper printing and on wood pulp to be used in the manufacture of the same paper:—

Article 1.—From the date of sanction of the present Act and until the expiration of the third month which will follow the end of hostilities, the reduction of the customs dues covered by the Decree of February 16, 1915, is increased from 60 per cent. to 95 per cent;

(1) On paper other than fancy, mechanically made, weighing more than thirty grams per square metre intended for the printing of newspapers;

(2) On wood pulp, mechanical and chemical, intended for the manufacture of the same paper.

Article 2.—However, should the Government deem it advisable, the dues thus reduced may be re-established at their normal rate, before the expiration of the delay fixed by the preceding article, by Decree adopted by the Council of Ministers.

Reports recently received from St. John, N. B., indicate that there will be a smaller cut in the woods during the coming winter than there was last winter. This is the outcome of trade conditions in Great Britain, high ocean freight rates and scarcity of vessels. Up to the middle of September little had been done by operators, while in previous years, work was well under way by that date.

New plant of the Shepard & Morse Lumber Company at Gaspe, P. Q.

An Interesting New Plant at Gaspe, P.Q.

Shepard & Morse Lumber Company's Operations in a New Field—Excellent Equipment and Shipping Facilities

The accompanying illustration will give readers of the Canada Lumberman an idea of the appearance of the plant which has been completed at Gaspe, P. Q., this year, by the Shepard & Morse Lumber Company, Boston, Mass. The construction of a sawmill plant in Gaspe was not so easy as it would be in most other parts of Canada. In the first place, the winter in Gaspe is about two months longer than in almost any other part of Canada. One may gather some idea of the length and rigor of the winter from the fact that, early in the month of May, the Shepard & Morse Company were teaming across the ice. In fact, it was only a short time previous to the first week in May of this year that the company teamed their last 11-ton boiler across the ice from the railroad to the mill.

The plant which the company has erected at Gaspe is equipped for sawing deals of any thickness. During the present year they have been sawing almost entirely for the English market. If, in the future, the company wish to enter the South American trade, their equipment is such that they can easily do so.

Splendid Water Shipment Facilities

The illustration shows how well the company is equipped for water shipment. Their dock is about 600 feet long and will accommodate two ocean steamers at one time. The steamer shown lying at the dock, is the Eagle Point, 3307 tons. She was engaged to carry troops and supplies to England and was loaded with about 700,000 feet of lumber in the bottom for ballast. It will be seen that a schooner was also loading at the same time. The illustration does not show the shingle mill. Close to the dock the company have 35 acres of level land, on which they stick a large quantity of lumber. An important feature in connection with the securing of supplies for the company's operations is the fact that they have built a large warehouse upon the dock and can land supplies direct from the steamers that come down the St. Lawrence river from Montreal. The importance of this will be realized readily when one takes into consideration the fact that the country in the neighborhood of Gaspe is very thinly settled, and the company therefore have to take care of practically all their men. In order to make the men comfortable the company have erected a commodious bunk house and a cook house. They expect that in the near future they will find it necessary to increase this accommodation.

During the present year the output of this mill will be in the neighborhood of 16,000,000 feet. Although the timber at Gaspe is not large, it is very conveniently located. The company's limits contain from 200,000,000 to 300,000,000 feet which can be readily logged. The drive is a short one and only occupies a few weeks. Next year, if conditions are favorable, the company expect to take out a much larger cut. This year they had their output practically all sold before starting the mill.

In order to furnish material for the local trade the company have erected a planing mill, the equipment of which includes a planing mill resaw and a modern fast feed planing machine, including profiling attachment, on which they can dress almost any kind of lumber, or turn out moulding. They have also put up a shingle mill, and so are in an exceptionally good position to take care of the local coasting trade in dressed lumber and shingles.

One of the chief considerations that induced the company to locate at Gaspe is the excellent port which is there available. This is a most important matter because many of the other ports on the Gaspe Peninsula have very bad reputations, their roadsteads being open, with very little shelter for vessels. Nowadays, when it is so difficult to secure sufficient tonnage to move lumber abroad, the good harbor at Gaspe is a great advantage, as vessels will load there when they will not load at any of the other ports. The location is also a good one in connection with the St. Lawrence river trade, as Gaspe is almost in a direct line en route from Montreal to Great Britain. Nearly all steamers on this route must pass near by. Last year, when the Shepard & Morse Company had only a small operation at Gaspe, steamers were frequently chartered which took on part of their load up the St. Lawrence and completed at Gaspe.

Equipment of the Sawmill

The sawmill at Gaspe cuts spruce logs only, and has a capacity of 90,000 feet per day of ten hours. The main building is 30 feet wide by 204 feet long and is of wood construction. Logs are carried into the mill on an endless steel chain haul-up and kicked onto the log deck by a steam kicker. The deck is equipped with a steam deck stop and loader and a steam nigger. The band is a double cutting mill with 8-foot wheels and takes a saw 14 in. wide, 14 gauge. The carriage is all of steel construction and is operated by a twin engine rope feed rig. The resaw is a 7-foot Clark horizontal machine with several unique features in its design, which enable it to turn out a large amount of lumber at a minimum labor cost. It is expected that 90 per cent. of the output of the mill will be made on the resaw. It has a double table, so that bothsides of the table can be worked entirely separately, and stock can be sawed by steam setworks that regulate the thickness, lowering and raising the table to make the required thickness instantly. This machine is almost a sawmill in itself. After one slab has been taken off the log it can be handled entirely on this horizontal resaw and sawed into any desired thickness.

The edger is of the large double table type. The slabs and edgings are cut into 48 in. lengths on a 5 saw slasher. The trimmer is of the two saw "Canadian" type. Two men can trim any length wanted from 6 to 20 feet. The lumber drops from the trimmer onto a set of assorting chains 100 feet long, where it is placed onto the yard trucks according to size and grade. The mill throughout is equipped with all necessary rolls and transfers to handle stock quickly and economically. The filing room is located overhead, so that the band mill and resaw saws can be hoisted direct into it from the machines.

The plant was designed by Clark Bros. Company of Olean, N. Y., who furnished all the machinery except the engines and boilers. The Calhoun Bros., who are managers of the Shepard & Morse Gaspe properties, superintended the construction of the mill last winter and have succeeded in producing one of the most economical mills in Canada in regard to the number of men employed per thousand feet of lumber manufactured.

The plant is furnished with power by 4 boilers, 72 in. x 16 ft., which were furnished by the Waterous Engine Works Company Ltd., Brantford, Ont.

G. A. Grier, Lumberman and Fisherman

G. A. Grier and his 400 lb. Halibut.

Many readers of the Canada Lumberman in eastern Canada will recognize the fisherman in the accompanying illustration as Mr. G. A. Grier of G. A. Grier & Sons Ltd., manufacturers and wholesale dealers, Montreal, P. Q. Most of our readers know of Mr. Grier as a very successful lumberman, but few of them knew that in the realms of sport he was also capable of landing big things. The particular fish shown in this illustration is a 400 lb. halibut, which Mr. Grier caught in the St. Lawrence river not far from Little Metis. As far as Mr. Grier knows this is the largest halibut ever caught in the lower St. Lawrence. It measured 7 ft. 9 in. in length and was about 3½ feet wide. In order to catch this class of fish one has to go out a distance of four or five miles from the shore, where there is very deep water. The tackle used is a hand line with a herring bait. The halibut is a very game fish and this particular sample took Mr. Grier about an hour and a half in bringing it alongside the boat. After such a fish is brought alongside it is gaffed and then has to be killed by blows from an axe through the backbone.

The Story of an American Home

The Western Forestry & Conservation Association have drawn up an interesting "Story of the American Home" which they have published upon the back covers of the program for their annual conference to be held in San Francisco on October 19th and 20th. The "Story" is in the form of a series of questions and answers as follows:—

What are the best things a nation has? Homes.
What are homes usually built of? Wood.
What furnishes homes? Wood.
Where is the home center? The fireside.
What burns there, reflected in happy faces? Wood.
Where do wives and children watch it? In wooden chairs.
Where do the little feet patter all day long? On wooden floors.
Of what are household articles mostly made? Wood.
And our books and newspapers, that make us civilized? Wood pulp.
Where does our food come from? Wooden fenced fields.
Where is it stored? Wooden barns.
How is it packed In wooden boxes.
How is it shipped? In wooden cars.
And then Over wooden ties.
Is that all? And wooden docks.
How does it reach us? In wooden wagons.
What cooks it? Wood.
What lights the fire Wooden matches.
Where does our water come from? Woodland springs.
What does it see on the way? Wood-sheltered game and fish.
What does it do on the way? Water the wooden fenced fields.
What supports the nation's homes Its industries and payrolls.
What is America's greatest manufacturing industry? Lumbering.
Altogether, then, what does most to build, supply and support American homes? WOOD.
Shall we give it a square deal?
THE FOUNDATION: FORESTS AND FOREST INDUSTRY.

Possible Trade Opening in Spain

Oregon pine, introduced in small lots, transshipped from neighboring countries, where a consignment was sent by direct steamer, is much liked in Spain, both for the nature of the wood and for the large sizes, although all dimensions can be used. As the wood trade in Spain is in a flourishing condition and increasing every year, there is sure to be a market for Oregon pine if prices can be made to suit local requirements. Much construction work is in progress, such as railways, harbors, public buildings, warehouses, irrigation works, and bridges. Hence a steady demand exists for all sorts of building woods, especially large sizes, and Oregon pine will undoubtedly be very acceptable if its price delivered in Spain can be reduced. The present high quotations are caused by heavy freight rates, but Spanish lumber buyers look forward to shipments via the Panama Canal. With the route shortened from California and the Northwest, the lumber trade with Spain is certain to be augmented.

A vast amount of wood is used in Spain for packing cases for fresh and canned fruit, vegetables, olive oil, wine in bottles, canned sardines, and anchovies. For this purpose native wood, which is generally of small size, is employed to a certain extent and would be still more largely consumed in this way were it not for transportation difficulties. The deficiency, therefore, is made up of short lengths of Scandinavian wood. Spanish importers in buying longer lengths for building purposes have to take shorter lengths as well, in order to avoid payment of higher prices, as the short lengths are difficult to sell in the north.

For large packing cases common spruce was formerly imported from Canada, but freight rates have increased to such an extent that purchases are now infrequent. When this trade lessened white pine similar to Canadian spruce was imported from Austria and neighboring countries where there were facilities for shipping by the Adriatic. This kind of lumber was brought to Spain until August, 1914, by regular lines of steamers at low freight rates. When the Canadian wood that had been used for large packing cases became too dear extensive tracts of land in Spain near the railroads were planted with poplar trees, the wood of which is much liked here for moderate-sized packing cases. With the disorganization of the freight steamer service and the difficulty in receiving sufficient lumber from abroad these plantations, on many of which the trees were large enough for felling, became especially serviceable. The lumber trade has also been able to avail itself of the native pine, of which there are considerable quantities of small trees. Several railways have been constructed to run into such forests as are available, so that the lumber can be cheaply transported after being sawn into the exact sizes required by the packers and without having to pay railway freight on waste wood and sawdust. This is of immense advantage to the consumers because of the savings in customs duties. Pieces of wood, even in short lengths, both thin and narrow, are classified as being ready for use and pay a heavy duty prohibitive for material of this kind for making packing cases.—United States Consular Report.

Fire Permits Required

During the early summer of 1915, serious fires, causing loss of property amounting to several hundred thousand dollars, occurred in the vicinity of the International railway of New Brunswick, now a part of the Government railways system. These fires were due to the slash-burning operations of settlers during a period of drought. Following investigations by the chief fire and game guardian of the province, the Minister of Lands and Mines, on July 10, promulgated a regulation covering the situation in the region particularly affected by settlers' fires. This regulation provides that before any brush piles or slash, resulting from clearing lands, can be burned in the Hazen and Grimmer settlements, in the county of Restigouche, or on lands adjacent thereto, a permit in writing must first be obtained from the caretaker of said settlements, and due notice must be served on the adjacent land owner or occupier.

There is already a law in the province of Quebec which requires settlers to secure a permit from a forest officer before setting fire to their clearings, during the spring and autumn periods. British Columbia has a similar provision, applicable to the period between May 1 and October 1 of each year. The regulations for Dominion forest reserves, located in the three prairie provinces and the railway belt of British Columbia, similarly require a permit for settlers' clearing fires between April 15 and October 31 of each year.

Past experience has shown conclusively that the permit system, wherever adequately enforced, reduces to a minimum the damage from the spread of settlers' fires, which have cost the country millions of dollars in the past, in addition to considerable loss of life. Ontario is the only great forest province in which no action along this line has been taken. The Ontario Act does not forbid the setting of clearing fires at any time. It merely prescribes that, where such fires are started, the settler shall exercise and observe every reasonable care and precaution in the setting out or starting of such fires and in the managing of and caring for them after they have been started, in order to prevent them from spreading. Experience all over Canada, and particularly in Ontario, proves that such provisions are not adequate, and that legislation is necessary to prevent altogether, or at least to regulate, the setting of clearing fires during periods of the year when there is a possibility of such fires spreading and doing damage. It is in the interests of the Province of Ontario to follow the progressive lead of the other provinces in this matter, which is of the greatest importance from the point of view of forest conservation.

New Sawmill in Operation at Edmonton

North West Lumber Company's Fine Plant—Standing Timber Tapped by Two Railways—Good Driving Facilities

A large sawmill 125 x 56 feet, three storeys high, has just been completed at Edmonton, Alta., for the North West Lumber Company. This sawmill is one of the largest and best equipped sawmills in Canada west of the Great Lakes. The company is one of the main enterprises in which J. D. McArthur, President of the Alberta and Great Waterways and the Edmonton, Dunvegan & B. C. Railways is interested. North of Edmonton are large areas of standing timber, especially in the Peace River country at the junction of the Athabasca and Peace Rivers. Two new railways now building northward from Edmonton into the Peace River country will tap these valuable areas of standing timber. The country is well wooded and the timber valuable, but for lumbering purposes it is considerably scattered. It will now be possible to bring saw logs from all points in the wooded country from which these roads tap to Edmonton by the establishment of this new sawmill. From Edmonton, lumber can be distributed throughout the prairie provinces to the East. As already stated, a large quantity of the spruce timber in the Athabasca region is in clumps too small to warrant the establishment of a mill in their vicinity that could be operated at a profit. By the establishment of a mill at Edmonton all spruce timber within hauling distance of the Edmonton, Dunvegan & B. C. Railway or the Alberta Great Waterways in the country which they pass through, will also become available to furnish lumber and ties for the railway. Handled otherwise, it would prove unprofitable, if not go to waste altogether.

The North West Lumber Company, Edmonton, Alta. View of Completed Buildings.

The sawmill is of frame construction, built on concrete foundation. The machinery is of the very latest type having in view speed in cutting and saving in power, waste, and manual labor.

Illustration No. 1 shows the completed buildings of this company. Illustration No. 2 shows the interior of the sawing room. This room is situated on the upper storey. Sawing machinery includes two double cut band saws, a band resaw, and two edgers. The logs are delivered from the railway to an artificial pond 350 feet x 100 feet and 6 feet deep, and are taken from the pond to be sawed by a jack ladder. Two logs will be sawn at the same time. From the edgers the lumber is transferred on rollers to small cars on which it is taken to the piling grounds close to the railway tracks.

Two brick power houses have also been constructed, one of which contains four boilers to generate power for the 700 h.p. engine which will drive the mill. The second brick house contains 350 h.p. engine and two boilers which will generate electric light for the mills, railway works and residences, and furnish power for all parts of the plant except the sawmill itself.

Illustration No. 3 shows the interior of the filing room, which is situated in the planing mill. This building is two storeys high.

The various floatable streams will prove valuable inasmuch as those which are crossed or touched by the railways, will widen the reach of territory according to the conditions along each area. Logs can be floated down the Athabasca and all its tributaries, which include the Pembina, Macleod, Baptiste, and several smaller ones. The railway crosses at Smith where the various drives can be boomed and there loaded on to cars. Similar conditions prevail regarding the streams flowing into the Lesser Slave Lake whose outlet reaches the Athabasca just below Smith. It is also true of the Athabasca River and its tributaries in the territory between Athabasca Landing and Fort McMurray, also of Clear Water above Fort McMurray, which has a large amount of valuable timber along its course.

With waste eliminated to a fine point and under the considerable improvements which have been made in the conditions of modern sawing, it is now possible to haul logs economically by rail which was not true in the days of the circular saw. It is certain that with such an immense area of heavy timber to draw from, and the easy and cheap transportation afforded, an undertaking such as that which has been established at Edmonton will be permanent for many years.

The British Columbia Forest Branch of the Department of Lands furnishes the following information in connection with laying shingle roofs:—Wet shingles thoroughly 24 hours before laying. Use 3d zinc, copper or galvanized wire nails. For 1-3 pitch roof lay 4½ inches to the weather. For 1-2 pitch roof lay 5 inches to the weather. For the sides of buildings lay 6 inches to the weather. Break all joints as far from the end as possible. Ordinary wire nails rust out leaving shingles loose and ready to be blown off, causing holes and leaks. Avoid this by using cut iron, galvanized wire, zinc or copper nails.

Mr. John Hanbury, the well-known lumberman of Vancouver, B. C., formerly of Winnipeg and Brandon, Man., was painfully injured recently when his automobile backed over an embankment and fell 15 feet. Fortunately his injuries were not serious.

The North West Lumber Company, Edmonton, Alta. Sawmill Room.

The North West Lumber Company, Edmonton, Alta. Filing Room.

Timber Required for Hutting and Trench Work

With further reference to the item appearing in Weekly Bulletin No. 608 of the Department of Trade and Commerce, under the caption "Timber Required for Hutting and Trench Work," the department is now in receipt of the particular sizes, with the approximate percentage of each size, that will be required by the office of works London, England. The following are the specifications:—

3 in. x 9 in., 14 per cent.; 2 in. x 9 in., 7 per cent.; 1½ in. x 9 in., ½ per cent.; 1 in. x 9 in., 16 per cent.; 3 in. x 6 in., 11 per cent.; 4 in. x 4½ in., 5 per cent.; 1 in. x 6 in., ¼ per cent.; 4 in. x 3 in., 2 per cent.; 4 in. x 2 in., 13 per cent.; 6 in. x 2 in., ¼ per cent.; 3 in. x 2 in., ½ per cent.

	Per Cent.
1 in. tongued and grooved flooring	12
1 in. rough boarding	2
¾ in. rough boarding	6
¾ in. weather boarding	2
¾ in. matching	1½
½ in. matching	½

The office of works have recently placed large contracts for timber on both the eastern and western sides of Canada, and are now prepared to consider carefully offers of tender, F.O.B. Canadian port, for hutting and trench work.. It is hoped, therefore, that successful tenders will be placed.

Prices are to be submitted with dates of delivery in the drafting of the tender.

Initiative Swells the Profits of the Retailer

We are indebted to Mr. E. E. Beckett, manager of the Lumber Manufacturers' Yards, Limited, Regina, Sask., for a description of an unique method of utilizing a quantity of 2-in. overstock. Mr. Beckett is the originator of the scheme, which is outlined below:

"Early this spring our company decided that they had an overstock of 2-in. plank at several yards and were looking for a way to turn this into stock which would be more quickly disposed of. The cost of loading and re-shipping this stock made it quite evident that this would not pay, so we got the idea of ripping the material to the required size in the yard. We started to experiment at Regina with a self-contained sawing machine; by that I mean a saw bench with small gasoline engine bolted to same, such as is commonly used by contractors, but we found that this was not quite satisfactory because to get sufficient power we would have to buy a machine of at least four or five horse power, and this would weigh too much to be easily moved from town to town on bad roads. We have an old Ford car, 1911 model, which was not in use, so the idea occurred to us of using it for power to drive a saw, and here you see photographs of the results. This machine has given us splendid results. We had a lot of plank on the Grand Trunk line. This has all been ripped up into 2 x 4 and 2 x 6 and is being sold, whereas some of this material was dead stock before being ripped. One of our superintendents loaded the machine at Fort Qu'Appelle one morning, drove to Edgeley, which is 24 miles distant, set the machine up and ripped 7,600 ft. B. M. 2-in. plank into 2 x 4 and 2 x 6, reloaded the machine and drove to Avonhurst (7 miles distant) that evening and set the machine up again to be ready for work next morning.

You will see from the photograph that the power is taken from the two rear wheels of the "Ford" and transmitted to a countershaft which is attached to the front of the saw bench frame, where in turn we have a 20-in. pulley driving on to a 3-in. pulley on the saw mandril. This running the car at normal speed gives us a speed at the saw of about 3,000 revolutions per minute. We are using a 12-in. saw, number 12 gauge.

The driving pulleys on the car wheels are built up and turned to the size of the iron rim of the car wheel and tapered on the edge so that they sit snug under the wheel and cannot work loose. They are fixed to the spokes by four hook bolts, the hook end catching the spoke and is tightened up from the outside.

The bench itself is just a homemade affair which a country carpenter put together for us, and is built out of 4 x 4 frame and maple flooring for top. This machine is very easily handled, being very light. It can be taken down and put in the truck in four parts in about ten minutes. The whole outfit, including bench, countershaft, pulleys and belting, weigh only 500 lbs. So you will see how easily it can be hauled from place to place."

The Lumber Manufacturers Yards, Limited, is one of those go-ahead concerns which are so few and far between throughout the prairie provinces of Western Canada. They are unlike many of the judges, who sit in the same kind of a room that the judge sat in 500 or 2,000 years ago, and they are always looking back for guidance in their day's work to precedents of the past. Progressive farmers and lumbermen are now studying the great problems of supply and demand, marketing and distribution. So it is that we discover the lumbermen who are progressive in every sense of the word are able to make new discoveries which help them to very materially swell their profits. Such a procedure as that outlined above would have been laughed at as being ridiculous and unpracticable by the lumbermen of a few years ago.

A further view of Mr. Beckett's ingenious contrivance at the Regina yard of the Lumber Manufacturers Yards, Limited.

Furthermore, we would ask whether a lumberman, finding that such a device as that of Mr. Beckett's meant an additional revenue to him would be willing to give out full particulars to his brethren in the lumbering industry? We emphatically say no! However, this state of affairs is a thing of the past, co-operation is ousting the cut-throat competition in all lines of business. This is observed at all the different meetings of the various associations. This matter of co-operation is emphasized very strongly when Mr. Beckett writes to the Western Lumberman saying that he will gladly do his best to supply any further information to any of our readers.

We solicit short descriptions of novel and useful methods and devices employed in the lumbering industry, both for wholesale and retail lumbermen. Photographs and sketches are an advantage as they add interest and aid explanation. Utility and not careful writing is the essential factor. Please write to the Retail Editor, 302 Travellers Building, Winnipeg, of any new departures which you may hear of.

Device adopted by the Lumber Manufacturers Yards, Limited, Regina, to dispose of overstock of 2" plank. This machine was designed by Mr. E. E. Beckett who is marked by a cross in the photograph. Mr. Beckett is local manager of the Company at Regina.

Inquiry for Canadian Lumber

There has been a satisfactory response from Canadian firms interested in the market for birch and other timber, to which reference was made in the Weekly Bulletin No. 601 of the Department of Trade and Commerce. Canadian lumber shippers will be interested to learn that a firm at Leeds, Eng., who formerly were identified with Russian trading interests, are anxious to open up connections with shippers in Canada of rough-sawn lumber. Negotiations would be entered into for the prospective purchase of lumber suitable for shipment to this market and the request is made for information as to the kinds of wood, dimensions, prices f. o. b. Canadian port, terms of payment, and other details necessary to enable the inquirer to consider fully tentative proposals. Should these appeal favourably it is possible that the firm may instruct a representative to proceed to Canada to inspect the lumber.

Making Sure of Your Profits

By Edward P. Leeds

Competition and the nature of the work they do compel woodworking concerns which execute large orders for the interior woodwork in office buildings, stores, and so on, to estimate costs closely, and submit proposals before they secure contracts. In making these estimates, the work that will have to be done is literally picked to pieces, divided and subdivided many times, and the figures finally arrived at are gained by a compilation of all labor and material costs entering into the work.

Inasmuch as payment on the order is usually made on the basis of 80 per cent. of the amount of actual labor performed, and paid for by the man who does the work, and the material used, it is vital that these costs be accurate and arranged in such a form as to embrace every detail. In some cases payment is made on the report of a firm of certified public accountants, who examine the books monthly and sometimes find it necessary to trace the actual work for which payment is made.

The system used by a Philadelphia concern has proved especially effective. As soon as an order is received in this concern the entire job is given an order number and is then subdivided in the following manner:

Job No. 300: Nature of job—interior woodwork for the twenty-five-storey Brown building.

Subdivisions

Doors	300-1
Windows	300-2
Sills	300-3
Mantels	300-4
Mouldings	300-5
Sash	300-6
Trim	300-7, etc.

Cost sheets are arranged as shown on Form 1. The sheets for each order are preceded by a general sheet bearing the terms of the order, time when it must be completed, shipping instructions and all necessary information. The reverse side of the cost sheet (Form 2) shows in detail the disposition of the money that is charged on the face of the sheet. When work is about to be started, a copy of the estimate as originally made is given the cost clerk, who immediately places the details of the estimate in red ink at the head of the column under which the estimate was made.

How Labor Cost Records are Kept

Labor costs are collected in the factory on a series of job tickets, punched for time by the individual workman and containing all essential information. These cards are gathered at the close of the day and arranged serially according to the numbers of the employees. The employee numbered 100 may have been engaged during the day upon ten different order numbers. In this case ten cards for that would have to be in evidence. To prove that all the cards are accounted for, the total number of hours and minutes shown on the operation cards must agree with the total time the workman was in the factory, as evidenced by the record on his time card.

At the end of the week the cost clerk makes up a trial payroll from the cost cards. The bookkeeper has already prepared the regular shop payroll from the weekly time cards which are rung in morning, noon and night as the workmen enter and leave the factory. These two rolls are then compared, and if they do not show exactly the same pay for each workman, an error is apparent, and is easily traced and corrected. The time of outside employees (those actually engaged in erecting the work in the building itself) is sent to the home factory by their foremen. Separate time reports are used for each man, showing just what part of the job he worked on.

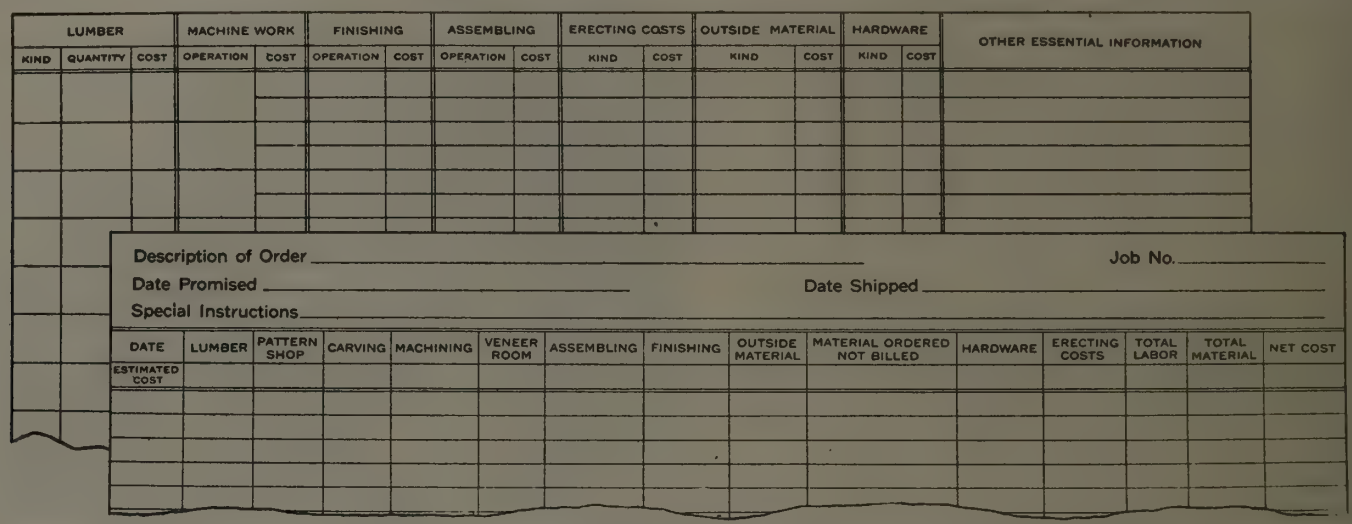
After the payroll is finally corrected the cards are sorted and arranged by job numbers, and rearranged under the job numbers by departments. It then becomes a simple problem to enter the costs under their respective headings. To prove that no figures have been omitted in entry, the entered costs are totalled and must again agree with the payroll figures.

The cards are next taken and sorted by operations. The total expended under each operation is entered in the proper place on Form 2. The following example will illustrate: If, under the column "machining," it is shown that $200 has been expended, the reverse side of the sheet shows how $60 has gone for cutting, $40 for moulding, $60 for joining and $40 for tenoning.

Making Actual Costs Check Up Estimates

The estimated figures are always placed at the head of the cost sheet. The reason for this is that the progress reports on work in the factory and outside show the stage of completion. The cost book shows a total of the actual money expended for labor. If, then, the cost of a particular piece of work had been estimated at $100, while the cost book showed that $75 had already been expended and the work only half finished, an opportunity is provided to check at once any shop errors, and so make the job, when it is completed, show a profit instead of a possible loss.

It is poor consolation for the man in charge of the work to have to go to the head of the firm after an order is completed and report that the firm lost on the job. It is much simpler to keep in constant touch with the expenditure on the work, and comparative cost-keeping serves this purpose admirably.



LUMBER			MACHINE WORK		FINISHING		ASSEMBLING		ERECTING COSTS		OUTSIDE MATERIAL		HARDWARE		OTHER ESSENTIAL INFORMATION
KIND	QUANTITY	COST	OPERATION	COST	OPERATION	COST	OPERATION	COST	KIND	COST	KIND	COST	KIND	COST	

Description of Order _____ Job No. _____

Date Promised _____ Date Shipped _____

Special Instructions _____

DATE	LUMBER	PATTERN SHOP	CARVING	MACHINING	VENEER ROOM	ASSEMBLING	FINISHING	OUTSIDE MATERIAL	MATERIAL ORDERED NOT BILLED	HARDWARE	ERECTING COSTS	TOTAL LABOR	TOTAL MATERIAL	NET COST
ESTIMATED COST														

Forms 1 and 1: The front and reverse of the cost sheet are shown above. The estimate is written on the face (front card) and the details of distribution are given on the reverse side. Each job's cost sheet is preceded in the cost ledger by a page which gives the terms of the contract.

Keeping Track of the Materials Used

When material required for a job is ordered, the cost clerk is furnished with a copy of the purchase order, from which he can tell the kind of material ordered, price and the job number for which it was ordered. He enters this on the cost sheet under the proper job number in the column headed "Material ordered, not billed." When this material is actually received and paid for, the account again passes through his hands and he immediately takes it from the column where it previously was entered and places it in its proper place as a paid account against the job.

The reason for making entries in this manner is that, in the first place, there may be a thorough and concise account of the job in the cost book; secondly, it frequently occurs, when establishing the cost of a partially-completed job, that material which has been ordered and checked off the estimate of material required is not included in the cost book, for the reason that no bill has been passed through for it. Thus, misleading information is obtained in regard to the amount of material, and this sometimes proves costly.

Materials used from stock, such as small hardware, lumber, paints, etc., are drawn out on a regular requisition which specifies the job number. When filled, these requisitions are sent to the cost clerk, who extends cost and enters it in the proper place.

As to overhead, all employees, as stated before, are required to turn in daily time cards showing the length of time they worked on each particular class of work. These cards are extended, sorted as per classification of work and entered in the proper maintenance account, such as "machinists," "carpenters," "millwrights," "electricians," "clerks," "sweepers," and so on. The percentage of burden is then determined on the basis of the proportion of direct to indirect labor, computed in terms of dollars and cents.

Expense accounts of men travelling on jobs erected on outside orders are kept separate and classified into such items as "transporta-

tion," "hotel," "telegrams," "minor incidentals," and so on, and find lodgment on the cost sheet.

How Costs Are Summarized on a Single Sheet

In short, the sheet referred to balances accurately with the bookkeeper's ledger, gives a complete and correct account of all labor transactions, and is the court of last appeal.

Where small jobs are going through the factory in conjunction with large orders, the cost record is kept in the same manner as for large jobs, excepting that one cost sheet can be utilized to contain a record for anywhere from ten to fifteen different jobs. These small jobs are given arbitrary order numbers such as "Z-1," and so on, and the cost clerk enters them in that way in a separate part of the cost book. When it is considered that costs are entered weekly, it will easily be seen how this can be done.

It will also be seen with what facility such small jobs can be computed, as all information thereto is in the office within a few hours after the completion of the work. It is then simply necessary to add the overhead profit, and bill for the amount due accordingly.—System.

Every Dollar Should Return a Profit

The question of the expense account is always a matter of important consideration in every line and department of business, for it marks the boundary between profit and loss. There is a natural tendency for expense to increase, and therefore a corresponding absence of inclination to decrease. Every business man knows how easy it is to add a little more expense to his business, and it is not long before the use of it will seem necessary. While if the attempt is made to reduce it, it will be found more or less difficult to do. As a rule, business men don't reduce expenses unless it is forced upon them, and only then because they are losing money rather than of its relation to the necessities of the business. There is a "fifth wheel" attached to many a business concern that could get along without it and not injure business, and it is these "fifth wheels" that the business world is learning to discover in these days of efficiency methods.

Expense may be said to be divided into two kinds, necessary and unnecessary, and just where the first named ends and the other begins is a never ending puzzle for business men to solve, because the dividing line between them shifts one way and the other according to the nature of business conditions. There is, of course, an absolutely necessary expense attached to every business in the form of fixed charges which must be met. Then there is the necessary charge for hired help and current expenses for the office. These might be included with the fixed charges, although there is a possibility of reducing some of them. What is unnecessary is that which can be dispensed with without materially injuring the business to the extent of a loss in profits and this is the problem which business men are called on from time to time for solving.

There are many other things about this subject of expense that might be discussed in a general way. But I have given you my ideas of the principal fundamentals of it, and will proceed to discuss it in its relations to the business of running a retail lumber yard.

What is necessary and what is not necessary expense have a varying interpretation according to the situation and conditions governing the yard. What is regarded as necessary items of expense in cities of 5,000 and upwards of population is not considered as such in the smaller villages and towns. Take the item of delivery as an instance. In the larger places, it is considered one of the necessary expenses of the yard and could hardly be gotten along without, while there are many dealers in the smaller towns who regard it so much as an unnecessary burden on the business as to entirely refuse to adopt it. There are others too, who would gladly get along without it if they could.

Some Are Forced Into It

There are few country town dealers who adopted free delivery of their own choice, especially among the older ones who first commenced business on the system of every customer doing his own delivery, and they were practically forced into it by some progressive competitor, and indirectly by the introduction of telephones through its influencing public opinion in demanding it. The towns where the dealers don't deliver by the dray-men or their own teams are of one mind and purpose in this and therefore can adopt and enforce a system of non-delivery. It is hard to do this, however, unless both of them have no teams of their own and let the town draymen do all the unloading from the car for them, but just so sure as one dealer thinks he can use his own team to advantage in doing his own unloading and other work about the yard, the carpenters will want him to deliver their contracted material and the temptation will be strong to make a free delivery turn the scale in his favor of the sale of a bill. Sooner or later his competitor will find it out, and the chances are that from that time on there will be free delivery by both yards of material for the building trades in the town, and from that it will grow to free delivery for the general public and this will make it a nceessary item of expense in the business. This is one item in the growth of yard expenses from what they used to be in the earlier days of the country yard business.

Another expense item is the telephone, where it has been established in a town, and there are few towns now without it. I think I am warranted in saying there are few dealers now without one in their office and where they have it, would not do without one if they could. But it takes the profit on a thousand feet of lumber to pay the monthly rent, and this too, may be classed among the necessary expenses. In a certain sense, this is free delivery, for in its use you save people the time and trouble of coming to the yard, although you pay for the means and convenience in doing it. The telephone and free delivery would seem to go together, although some dealers may not carry out this idea in practicing it. People can use the telephone in ordering stuff and the dealer can use it for finding the drayman to come to the yard and deliver it, but this is not a satisfactory way for either dealer or consumer.

Some dealers now consider it necessary to have an assistant in the office to keep the books and other routine work about the office. This is all right enough provided it adds to the efficiency of the yard system and helps in building up the volumn and profits of the business. But where it does not add to the last named items, it is more of a luxury than a necessity, for a yard may be highly organized in its system of accounting and looking after things about the yard and still not do the business and have the profits it should. Such a yard may be likened to having a twenty-five horsepower engine to do the work that one of ten horsepower could do. There is a danger of a business becoming top heavy with too much system. Too much sail without the ballast of a business that will warrant it. This can hardly be said, however, to apply to many concerns in the retail yard business, but it is true though that in a general way, the volume of business and the profits of the average yard have not kept pace with the growth of expenses and efficiency systems of doing business. Now I believe in having all these accessories to the running of a lumber yard, especially the assistant in the office, provided the dealer will use his liberty from the drudgery of office work in turning his thought and attention to creating and working up more business for the yard. If he does this, then his office helper becomes a necessary expense and essential for more business. System and office help is all right, but you must get the business to keep both effective and busy in making money for the yard.

Looked at as a Contribution

Retail lumbermen, as a general thing, used to think that advertising in the local paper was but little else than a contribution to the support of the piper and the general welfare of the town, but as for it being a help to their business, it was not considered as such and therefore an expense to be cut off or taken on as the tide of business ebbed and flowed. It was done in the same spirit as the giving of a charity or donation to one of the churches, but never was considered as a necessary part of their business. In these later days, however, there is an increasing conviction among the more progressive dealers that advertising can be made to increase their volume of business and they are finding their efforts justified by the success they are having in doing it. With this class of dealers it has become one of the necessary expenses of the yard, and in fact, more in the nature of an investment than an expense. So that what has hitherto been regarded as an unnecessary expense has been found to be a necessary part of the business because it adds volume and profit to it.

The expense item for hired help is, on the average, smaller in a country retail yard than in any other line of business of equal importance in the town. The reasons for it are well known to every lumberman, so I'll not mention them. There are probably not as many one-man yards as there used to be, but I presume there are a few even now. It would surprise some of the younger dealers to know how much business a single man could and did do in some of those old yards. I remember one year I did a business of nearly $30,000, and all the help I had was what I had to have in unloading and occasional assistance in piling when the alleys got too crowded with incoming stock. And there were others like me who did the same thing. But changed conditions and the multiplying of stocks handled, has practically made it necessary to employ one or more yard men. A yard has got to do a good business, however, to make a third man necessary. As it is there are many times during the year when he can be dispensed with. But this is not easy to do for when you do need him he may be employed somewhere else, and you have got to break in another and maybe an inferior man. But whatever help a dealer has he should not spend too much time "bossing" them. The more time he spends in working up more trade, the more necessary is his hired help to the business. Personal convenience ought not to count in the employing of help. The sold consideration should be, Will it subserve the profits of the business?

One Unnecessary Expense

As I have said before it is difficult to always draw the line between what is necessary and unnecessary expense to the yard. In a

general way it might he said that whatever operates as a cost to the business is an expense. This being so, there undoubtedly is a good deal of unnecessary expense in the cost of carrying the burden of the credit business which practically every yard is laboring under. The average dealer don't realize this in estimating his expense, but when you think of the additional capital it requires and the loss of interest on the long time accounts to say nothing of the risk in the loss of bad accounts, there is no getting round the fact that it is a charge on the business. Conceding that a certain amount of credit business is necessary, we must admit that all above that is an unnecessary cost. I think it is safe to say that the retail lumbermen could cut down their average amount of book accounts to at least one-half what they now carry and still do the same amount of business. I have talked with a good many dealers from different parts of the country and nearly all agreed with me in this. If this is true, then the other half is unnecessary and as it costs to carry book accounts then the half of what is now being carried is a cost that could be dispensed with.

Another item of unnecessary expense is the waste that is going on more or less in every yard; and a good deal of it too it, so to speak, right under the dealer's nose. It is surprising how little we see of this and how much there is to see in and around a lumber yard. We lack the consciousness and understanding sense of what is going on in this respect, before our physical eyesight. We see the tops of piles curling up in the hot sun; a lot of broken and short odds and ends scattered in the alleys and behind the piles, and we don't think of it as waste. We don't think of the old black stock under the piles as losing its value all the time. There is hardly anything in the stock that is not liable to waste and therefore a cost to the profits. There is more or less of unseen waste going on also, and it requires a constant search.

One of the hardest things to appreciate is the waste of time. There is more of this than we think for going on in the yard, not only in the time we and the employes are doing nothing, but in that which is lost in "going the longest way round" in doing things. We work hard, but we take more steps, make more motions and do more things to accomplish a result than is necessary. Very often the stock and buildings are so poorly arranged as to be responsible for a good deal of this waste motion. Some men can pile a fourth more lumber in a day then others can and yet not work any harder and it is all owing to the saving of unnecessary motion. Where there is free delivery time can often be saved by the bunching of deliveries. I used to instruct my carpenters particularly to save me all the hauling possible by thinking a little ahead of what they wanted. In this way I could give them better service and at a saving of time for both of us.

Where lumber is delivered by wagon from the car to the yard, much time can be saved and cars unloaded quicker by the use of a second wagon and a third hand. The usual way is to employ two men and one team and wagon. They go to the car and get a load and both men unload it. Now the way to do is to let the one man do the unloading while the other two are at the car loading on the other wagon. A man that is an expert in handling lumber can swing off a load in the alley as fast as two men can put on a load at the car. To rest up the alley man they can change off and let him take the car work for a while. This is no theory of mine. It is the way I did my unloading all the while I was running a yard here and it saved me considerable demurrage costs. A second wagon too, is a saver of a good deal of time in the course of a year. In busy days, the teamster can be kept on the load all the time delivering instead of having to stop the team while the wagon is being loaded as is the usual way. The saving of demurrage on cars alone will pay for its upkeep and the interest on the investment, if not save wholly its cost in a year.

Poor Advertising Is a Waste

Another item of waste is that which is made in poor and injurious advertising. Although it may be said that this kind of waste does not affect very much the class of dealers who don't believe in advertising. Still even these who dodge the local paper in this respect do more or less of what they think is advertising, but which is really money thrown away. The fellow who won't buy space in his local paper is pretty sure to get "stung" by some scheme or other in which he thinks he sees a profit that he don't see in newspaper advertising.

I don't like to say anything to discourage advertising, but I can't help but think that much money is wasted in the way that some dealers do it. The ordinary lumber ad in a country paper is a joke as far as getting results from it is concerned and if it is done with the intent and purpose it is money wasted. The thing therefore to do is to study how to advertise in a way that will make it pay and thus eliminate the waste spoken of.

It is a good rule to always have in mind and to follow that when you spend a dollar, let it be either for pleasure or for something that will bring you a money profit. Keep your dollars earning something and don't even let your stock waste your money by laying idle too long in the yard. There is more of this kind of waste going on than is appreciated. Keep it moving as much as possible and thus keep down the cost of investment.

There are leaks in the business of every lumber yard—in some more than in others, and of different degrees in size—and the decrease that has come in the volume and margins of the business render it more important than ever that dealers be constantly on the lookout for them. It is a good thing to always have it in mind that whatever in the nature of stock comes into the yard costs money and every part of it, no matter how small, that has its selling value injured or goes to waste in any way, is just that much taken out of the profits of the business. As units they don't seem much, but in the aggregate for a year, they amount to considerable.

There are leaks in operating too, such as the giving the odd cents in making change in the small sales; carelessness in the checking of stock coming in and going out. It is a good rule to follow never to wait till you get to the office to put down the items of a sale just made in the alley but note them down at once as they are passed to the customer. If you study the subject of leaks and hunt for them, you will find them. A good idea would be for you to think over the possible leaks and make a list of them and have it handy to look at. A good deal more can be said on this subject of expense that would exceed the limits of one article, but in this, instead of going into detail, I have given you some suggestions that perhaps will have a stimulating effect in causing you to give the subject closer attention and to eliminate what is unnecessary. I would also advise that you study to make your necessary expense as efficient as possible and get the greatest results out of it you can. Make every dollar you spend for a necessary expense bring you back at lease another dollar and don't forget to study the line between what is necessary and unnecessary expense.—C. H. Ketridge in The Mississippi Valley Lumberman.

Market in Russia for Saw and Woodworking Machinery

According to a recent issue of the United States commerce reports there is apparently a promising field in Russia for American trade in appliances and machinery necessary for the proper development of Russia's great timber resources, and also for various local woodworking industries. There should, for instance, be good openings for American logging locomotives, cableways, stationary engines, tractors, hoisting cranes, and machinery for saw-milling, for cutting shingles, and for the various details in woodworking operations.

The machinery for logging and saw-milling is supplied mainly by Germany, Sweden, Finland, and by Russia itself. The better classes of joinery tools were supplied by Germany previous to the war, and also, to a small extent, by the United States. The simpler kinds of woodworking machines have been made chiefly in Russia. The Russian repair shops have purchased wood planers of large sizes chiefly from Sweden. The Russian cooperage factories have depended for their machine tools chiefly on Germany, but the veneer mills, pattern shops, etc., have obtained most of their supplies from the United States.

Generally speaking, the methods employed in making use of Russia's enormous resources in standing timber are antiquated and uneconomical. It has been estimated that if any of the estates or companies controlling the vast timber tracts between the Volga river and the Ural mountains should attempt, with their present logging and sawing methods, to ship their splendid timber abroad they could do so only at a considerable loss. Such timber can be used, if at all, only for conversion into charcoal for blast furnaces.

There are immense stretches of country in Russia and Siberia covered with timber which is merely wasted. This seems a special pity, since the natural forest resources would seem to afford the only reasonable opportunities existing for any development of the land. The owners of such land would be glad to work it, but under present methods they would only suffer loss. The forests in the Ural mountains are largely owned by the Government and by companies operating iron and platinum mines and rolling mills and other factories. It would seem likely that if American methods could be introduced it might be possible profitably to export the timber by various river and sea routes.

It is the ordinary practice to fell the trees by hand and haul the logs by horse power, very slowly, a great number of men and horses having to be used and also much truck equipment. The saw-mills are said to waste about 45 per cent. of the material through bad cutting. Instead of sawing with one saw blade at a time, as by the American method, one cut being made each time, but made rapidly, and with the man at the machine being able properly to see and adjust his work, the millers here use a long frame reciprocating saw, with a number of blades hung and sawing slowly the result being that adjustments are difficult, and special complications occur through

knots and twists and uneven cutting, making it impossible to get the maximum out of each log.

The first American band-saw outfit in Russia was recently completed at Tsaritsin, on the Volga river, and is now in successful operation that much attention has been attached to it, and it may result in the complete revolutionizing of the Russion saw-mill industry. With one such example already in existence here, it becomes easier to promote American methods in every phase of the industry.

Considerable missionary work has already been done in introducing American swaged saws into Russia, and a number of the local mills have recently been showing a tendency to change all their saws for the swage type, even though they cost considerably more. At the same time, however. the mills will have to be taught how to use these saws, and, what is more important still, how to use the special tools for swaging the teeth.

There are comparatively few saws manufactured in Russia itself, and the trade in this most important line is thus almost completely open to foreign countries.

Handsaws, buck-saw blades, and the like, have hitherto been supplied almost exclusively by Germany, but there is no doubt that the United States could do a large business in these as well as in the better kind of crosscut saws, provided arrangements could be made for demonstrations by experts, especially to the lumber companies, who are big consumers of these kinds of saws. These demonstrations would entail considerable expense, but it would be sufficient for manufacturers to get into touch with a few of the leading lumber and sawmill concerns in the North Russian, Caucasus, Ural, and Siberian timber districts. If the saws were once introduced with the help of experts, the sales would probably be very large, as some of these companies consume thousands of dozens of these saws annually. English manufacturers are already doing a fairly large trade in crosscut saws.

The quality of the saws supplied by the United States, whether machine or hand driven, is considered satisfactory, but the prices of the American saws are sometimes double those of similar German and English makes. In connection with smaller handsaws, at least, the prices ought not to be materially higher than those of competing countries, notwithstanding that the quality may be better. Since the outbreak of the war the supplies from abroad have almost ceased, and dealers having become very short of English, French, and German saws are now able to gradually clear off old stocks of American manufacture, which have been unsaleable for many years owing to their high prices.

To bring about the general use in Russia and Siberia of American saw-milling outfits and woodworking machinery it would be necessary to conduct a campaign of education among the owners of large timber properties. However, if a few important outfits can be installed, they should serve as object lessons and thus create a demand. Until such demand can be created it is useless to expect Russian dealers to keep these goods in stock without liberal assistance from American manufacturers. As a matter of fact, the Russian dealers are not likely to be much interested in American saw-milling outfits until they discover that owners of timber properties are interested in them and wish to buy them.

Thirty-nine per cent. of the Russian Empire is estimated to be under forests, which in European Russia cover an area of 474,000,000 acres, in Finland 50,500,000 acres, in Poland 6,700,000 acres, and in the Caucasus 18,600,000 acres—a total of 549,800,000 acres, exclusive of Siberia. In the Ural provinces forests cover 70 per cent. of the area, in the northern provinces 68 per cent., and in the four lake provinces 57 per cent. It is estimated that in Western Siberia alone there are 465,000,000 acres of virgin forest, and Eastern Siberia, while not so richly endowed, has sufficient timber to supply the world's demand for years to come.

The Government owns 285,598,941 acres of forest land in European Russia, 12,826,387 acres in the Caucasus, 360,519,435 acres in Asiatic Russia, and 288,742,000 acres in the Amur region, a total of 947,686,763 acres. About 23 per cent. of the forest land belongs to landed proprietors and 9 per cent. to the peasantry.

Lumberman to Publish Memoirs

Former United States Senator Isaac Stephenson left Oskosh, Wis., on Sept. 15, with his family for his old home at Fredericton, New Brunswick, to spend three weeks exchanging reminiscenses of his boyhood days with the few surviving pioneers of that locality. The party, stopped en route at Boston and at St. John, New Brunswick. On his return Mr. Stephenson will distribute his memoirs, which are now in the hands of Chicago publishers. Five hundred copies will be published, but will not be for sale. The memoirs relate many incidents of interest in the life of the senator from his boyhood to the present, notably his rise from the humble environment in a lumber camp to positions of national prominence, fame and wealth.

Tank Cars for Fire Fighting

The management of the Government railways has made material progress in fire protection in Quebec since taking over the line of the National Transcontinental for operation. A tank car, for fire-fighting purposes, has been equipped and will be stationed at some convenient point between Edmundston and Quebec. This car has a capacity of ten thousand gallons and is equipped with hose to reach a fire five hundred feet from the track. The question of placing two similar cars at convenient points between the City of Quebec and the Ontario boundary is under consideration. Special fire patrols will also be necessary, and the details are being considered. Hon. Frank Cochrane, Minister of Railways and Canals, has announced that the same measures for fire protection will be taken on Government railways as are required by the Railway Commission of lines under private ownership. The measures referred to above constitute an excellent beginning. The Government railways are not under the jurisdiction of the Railway Commission.

Special tank cars for fire-fighting purposes constitute efficient means of conserving forest resources along railway lines. The Canadian Pacific railway has two such cars stationed at Brownville Junction, Maine, where serious fires had previously occurred. The Grand Trunk railway also has equipped a tank car during the present season, placing it at Algonquin Park station, to be used in extinguishing fires along the railway line between Ottawa and Depot Harbor, especial attention being given to that portion of the line within Algonquin Park. Excellent results have been secured by both the Canadian Pacific and Grand Trunk railways from the use of these cars for fire-fighting work. The accompanying illustration shows a test of Grand Trunk tank car, equipped for extinguishing forest fires along the railway line between Ottawa and Depot Harbor, with especial effort to Algonquin Park. Four streams can be played on a fire at the same time, if necessary. Fires can be reached, up to a distance of several hundred feet from the track. This tank car has already proved very effective during the fire season in May and June.

Tank Car Used for Fighting Forest Fires

The old 86th Battalion at Three Rivers, P. Q., is being reorganized and will become an English-speaking instead of a French-Canadian regiment. Among the officers are: Major, F. I. Ritchie, superintendent of Forests and Lumbering, Wayagamack Pulp and Paper Company; quartermaster, R. F. Grant, manager St. Maurice Lumber Company; Captain No. 2 Company, A. F. Cayford, secretary-treasurer Wayagamack Company; Lieuts. of No. 2 Company, E. L. Wilson, Wayagamack Company, and R. Collins, master mechanic of the same concern.

At the meeting of the Chambre de Commerce, Montreal, on September 15th, Mr. Leon Gagne, of the Canada Lumber Sales Company, Ltd., referred to the importance of Canadian lumber firms preparing for the increased trade with Great Britain and European countries which would arise after the war. If Canada did not take the opportunity of adding to her business it would go to other lumber producing countries. The chief need was to secure adequate ocean transport, and he was convinced that we had already lost trade through the lack of tonnage. We ought to secure more tramp steamers for the port. It was essential that we make preliminary arrangements so that at the termination of hostilities we would be ready to deal with the large volume of orders which he felt convinced would be forthcoming. The matter was referred to the Woods and Forests Committee, of which Mr. Gagne is chairman.

Practical Knife-Making

By John W. Bailey, Berlin, Ont.

Woodworking establishments possessed of a tool room or filing room for the purpose of caring for edge tools, moulding knives, etc., being very much in the minority, it falls to the lot of the majority of machine operators not only to do their own knife grinding, but also to make such new knives as are required from time to time for regular or special work. While possibly it is questionable economy for a concern to do their own knife making it often happens, however, that time will not permit of obtaining their requirements from a knife making concern. When such is the case a practical knowledge of knife making is a valuable asset to the machine operator.

Without doubt the first step in the process of making a moulding knife is to determine the pattern. Several systems have been advocated to accomplish this by drafting, the majority of which have been too elaborate, requiring too much valuable time to work out and for all practical purposes are no better than the method used by the writer, which has the advantage of being much more economical so far as time is concerned.

Without doubt the most important part of making a knife pattern is to determine the amount of knife projection necessary to cut the different members of the mould. The balance in any event is to sketch in the intervening parts freehand.

The writer determines the required knife projection by a scale made in the following manner, which for convenience may be made in the form of a steel rule to hang on a key-ring:

First, draw an outline the exact size of the cutter head used on the machine for which the knives are intended as at (a), Fig. 1 of the accompanying sketch, then lay out the projection of a straight knife past the lip of the cutter head as at (b), locate the centre of the cutter head as at (c) then draw a line from centre (c) to a few inches past the point of knife (b) as at (d). From the point of the knife (b) and at right angles to line (d) draw line (e). This line represents the cutting line for straight knives, as also the initial projection of moulding knives, and is the basis of our projection calculations. So at this point on line (d) proceed to mark off with a common rule such measurements as desired for determining the corresponding projections. In this case two inches are laid off in eighths as shown at (f). Then extend the line of the knife to a distance shown at (g) and with a compass, one leg of which is set at the centre of cutter head (c). The measurements are transferred from line (d) to line (g) as at (h). The measurements on line (d) represent the depth of cut and the corresponding measurements on line (g) represent the amount of knife projection required, and are what I refer to as the projection scale. While the accompanying sketches have reference to sticker knives, a projection scale for shaper knives may be made in precisely the same manner.

To make a knife pattern by the use of the projection scale mark off an outline of the mould as at (1), Fig. 2. (The outline of the heavy mould is the heavy line). Then at the thickest part of the mould draw a line parallel to its base as at (2), then at points where projections are to be determined draw perpendicular lines as at (3), (4), (5), (6), (7). The measurements from the horizontal line (2) to the outline of the mould on the different perpendicular lines may be translated into projections by the use of the projection scale, the intervening spaces to be sketched in freehand. These are shown in dotted lines. The balance of the knife may be laid out as shown, the depth of bolt slots and length of knife over all being determined by the size of the cutter head.

The pattern having been made the next step is to "rough out" the knife. Where considerable material is to be removed the quickest method is to cut the outline of the cutting edge by drilling a series of holes as shown in Fig. 2. After this is done the knife should be carefully ground to the exact outline of the cutting edge. The knife is now ready for bevelling and as over-heating the knife while grinding makes no difference at this stage of the process, the bevel grinding may be hastened somewhat if the knife is held in a handscrew or other convenient means so that the heat from grinding will not affect the hands. At this stage the knife should not be ground to a keen edge on account of the difficulty of holding a uniform heat when tempering. (I usually leave about one thirty-secondth of an inch of an edge for finish grinding). Now comes the most vital part of the whole process—the tempering. Many an otherwise well-made moulding knife is rendered useless through lack of knowledge of how to temper it. When such is the case the trouble is usually attributed to poor steel. In a majority of cases, however, the contributing element to an improper temper is over-heating. This is one thing that should be carefully kept in mind. Steel should never be heated until it scales, for this decarbonizes it. Although it can be hardened still the overheating has destroyed those ingredients that make it tough, with the result that it is impossible to obtain a keen cutting edge that will stand up to the work.

The lowest heat at which the steel will harden gives the best and toughest temper. A good plan is to take a small piece of the steel used such as the offal that is cut out by drilling, heat it to a dull cherry red, and plunge it into the water or oil as the case may be. Test with a file and if found to be hard, well and good, if not heat it again, this time slightly hotter than before, being careful that the heat is uniform. Test again, but in no case should it be heated hotter than is necessary to harden it. Whether water or oil is used there should be a quantity sufficient that the heat from the knife will not materially effect its temperature. Upon entering the knife into the bath it should be kept in motion and well near the bottom of the vessel. If the knife is removed before its centre has become cold it will cause checks on the surface. After the knives have all been hardened they should be polished on the face so that the color can be readily seen. When drawing the temper one thing to be remembered here, and which has often been the cause of failure heretofore, is that the face of the knife should be free of oil or grease, as its presence tends to produce a false color. To draw the temper secure a flat piece of iron or boiler plate, somewhat larger in area than the knife, and heat it to a low red; lay the knife on this, bevel side down, keep moving it about on the plate so that the heat will affect it uniformly, and watch for the desired color to appear. The color required varies in accordance with the future requirements of the knife. If a filing temper is desired it is necessary to draw to the "pigeon blue," but for the ordinary run of furniture mouldings or mill work it is more economical to use harder knives as they hold an edge much longer and on the average will do more work between grindings than those that are soft enough to file. This applies of

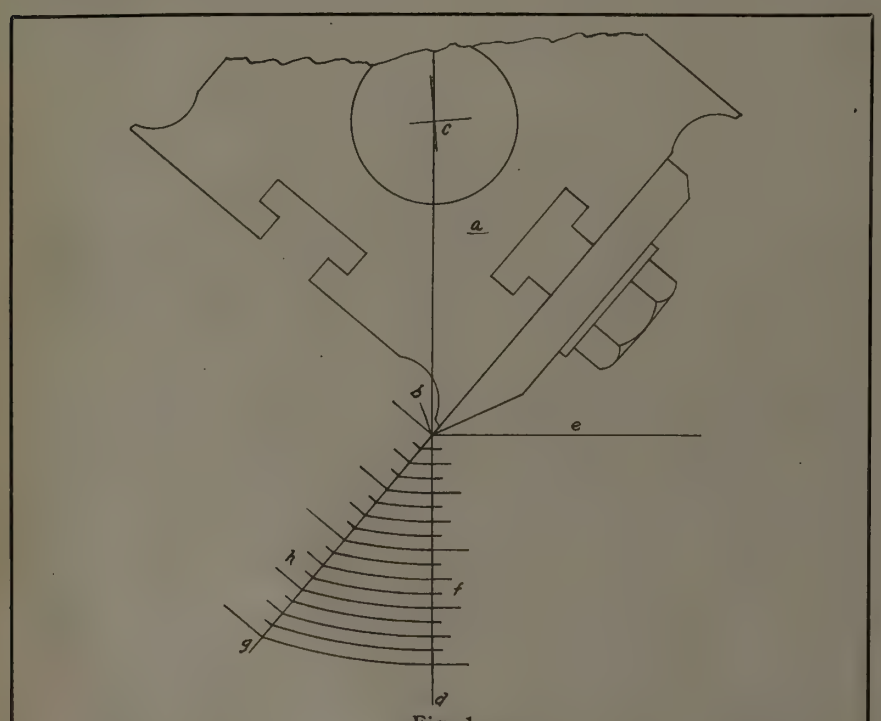


Fig. 1

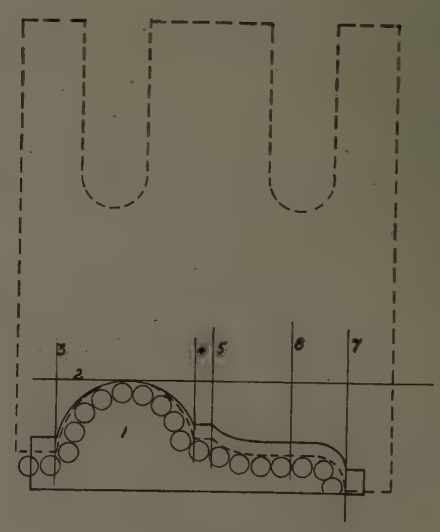


Fig. 2

course to knives that have been hardened to a low heat as they possess the maximum degree of toughness.

I have met a few woodworkers who when tempering prefer to plunge the knives at a heat that will produce the desired degree of hardness without having to draw the temper away. The plunge in this case is invariably made in oil. I disapprove of the practice as it is practically a game of chance even with those of considerable experience. It is much safer to harden first, then draw the temper, and for the average run of work on stickers and shapers the most satisfactory temper results from a purplish tint. This follows a dark straw color and at its first appearance the knife should be cooled. This produces a temper too hard to file but will stand up to all kinds of hard work.

I might cite some of the most important points to be remembered, which are these: First, temper at the lowest heat at which the steel will harden. Second, do not let the plunging bath become warm. If oil is used the container should be set in a vessel of cold water to keep it cool. Third, do not immerse the knives in the bath broadside; they should enter on end and preferably heel end first as thin knives are apt to warp if the cutting edge enters first. Fourth, do not grasp the knife with tongs near the cutting edge as this retards the action of the hardening bath. There is plenty of room for a good hold near the heel. Fifth, be sure there is no oil or grease on the surface of the knife when drawing the temper, as its presence retards the color and the knife is apt to be softer than the color would indicate.

Tempering moulding knives requires judgment and precision, but if the foregoing is strictly adhered to little difficulty will be experienced in producing knives that will hold an edge and stand up to plenty of good hard work.

Forest Fires Along Railways

The latest report of the Fire Inspection Department of the Railway Commission shows that during 1914 a total of 1,346 fires were reported as having been started in forest sections, within 300 feet of the railway track, on lines under the Board's jurisdiction throughout Canada. These do not include Government railways or lines under provincial charter, comprising about 15 per cent. of the railway mileage of the Dominion, for which no fire statistics are available.

The report states that the 1,346 fires burned over a total area of 191,770 acres, of which 49,326 acres, or 25.72 per cent., was young forest growth and 107,496 acres, or 65.05 per cent., merchantable timber. The balance of the area burned over was grass or cultivated land and slashing, or old burn not restocking. The total value of property destroyed by the fires was $433,442 of which $202,987 was for merchantable timber and 59,624 the estimated value of young forest growth destroyed. Of the above 1,346 fires, 904, or 67.16 per cent., were reported as having been caused by railway agencies; 137 fires as due to tramps, camp fires, etc., 62 fires as due to settlers clearing land, and 16 to other known causes. There were 227 fires reported as of unknown origin.

While the fire season of 1914 was one of the worst in years, the railways, on the whole, handled their fires efficiently, showing great improvement over the situation which existed before the Railway Commission issued its revised fire regulations in 1912. In many sections of the country, the railways are undoubtedly handling their portion of the forest fire protection problem in a more efficient way than are the respective governmental agencies. The latter are more or less hampered by lack of funds and by the patronage system of appointments. The private owners only too frequently afford little or no protection to their forest lands. In particular, the problem of regulating settlers' clearing fires is still in an unsatisfactory condition throughout a considerable portion of Canada, due either to the lack of proper legislation or to the difficulty in securing satisfactory observance of such laws as have been enacted.

Forest Destruction Due to Carelessness

At the summer Assizes, recently concluded at Parry Sound, Ont., two suits were entered against railway companies for damage to standing timber from fires caused by sparks from locomotives. At the conclusion of the session, the Grand Jury of the District Court for the district of Parry Sound took the opportunity in making its presentment to the presiding judge, to protest against the negligence of the officers, appointed for the purpose of preserving forests from fire, in bringing guilty parties to justice. The necessity of checking the enormous fire wastes of Canada was pointed out in very forcible manner, and the action of the Grand Jury, in taking this method of arousing public opinion on the subject, merits the highest commendation. The following quotation is taken from the text of the presentment:

"One of the important matters taken into consideration by the Grand Jury at this session was the awful destruction of our timber wealth by fire.

"Your Grand Jury, which is mostly composed of yeoman of the district, has come to the conclusion that unless the present laws enacted are enforced, and enforced with vigor, in the course of a few years the uncultivated portion of our district will be one vast brule.

"We are of the opinion that the laws governing the preservation of the timber are adequate if enforced and we will advise those in authority to see that in future this shall be done.

"We have made enquiry regarding prosecutions and find that not a single criminal case has been instituted and the settler as a rule is not in a position financially to proceed in the civil courts.

"The blame of forest fires may be attached to careless settlers, careless tourists, careless bushmen and careless brushmen and careless railwaymen, but in our opinion this carelessness will continue till the officers appointed for the purpose of preserving the forests from fire wake up to their responsibilities and bring the delinquent parties to justice by criminal proceedings."

To the foregoing indictment, a word should be added respecting the great improvement of recent years in the railway fire situation. As a result of the thorough system of fire prevention measure required of the railway by the Railway Commission, and of the effective co-operation of the railways themselves, the latter can no longer be singled out as the arch offenders in connection with out annual forest fire record.—Conservation.

Southern Hardwood Firm Opens Toronto Office

The Cyrus C. Shaper Lumber Company of South Bend, Ind., are now represented in Canada by Mr. E. P. Morden, one of the directors of the company, with office and residence at 124 Bedford Road, Toronto. The company are large southern hardwood lumber manufacturers, specializing in oak, ash, hickory, poplar and gum. Their head office is in South Bend, Ind., and their main assembling yards are at Cairo, Ill. They have mills in Tennessee, Arkansas and Mississippi. Mr. Morden is securing a splendid connection among the Canadian trade.

Simonds Company Enlarging Lockport Plant

The Simonds Manufacturing Company are now at work on a new building which will greatly increase the productive equipment of their Crucible Saw Steel Mill at Lockport, N. Y. The new building will be about 68 x 153 ft. and will be for the purpose of installing a bar mill which will consist of one train of 16 in. rolls and one train of 10 in. rolls, both motor driven. The structure of the new building will be the same as the other buildings which were put up by the Simonds Manufacturing Company at Lockport, N. Y., in 1911—steel frame, galvanized siding, saw tooth tile roofs. Much of the product of this mill will be used by Simonds' three factories, one at Fitchburg, Mass., one at Chicago, Ill., and one at Montreal, Que. They are now using the entire output of saw steel from their rolling mill. Contracts have been let and it is expected that the new mill will be in operation by December 15th.

Mr. George Kersley has resigned his position as general manager of the Dominion Mahogany & Veneer Company, Limited, Montreal West, and is succeeded by Mr. H. Lefeber as manager. Mr. Kersley has opened an office at 74 Bank of Ottawa Building, Montreal, in the same line of business and as a wholesale lumber dealer.

A Cheerful Prophesy from Liverpool

Editor Canada Lumberman:— Liverpool, England.

Just a few lines from an optimistic onlooker of passing events. Ninety per cent. of the people in this country are of the opinion that the war will continue at least another year. I am one of the ten per cent. who think nothing of the kind. Germany cannot hold out so long. Germany cannot face the severe Russian winter. Feeding and clothing her millions, bringing up the necessary supplies, including munition and heavy guns will be almost impossible. Germany has already advanced so far in the east, almost under the strategical beckoning of the Russian Grand Duke, that she cannot now retire, nor is she able to release half her eastern army to send to the west to help to crush the French and our gallant Canadian and English armies. We in the west are the masters of the German line and, before the winter snows arrive you will see the Germans get such a knock that they will cry for quarter where no quarter will be given and so the "beginning of the end." The squealing pig will be made to bite the dust—a consumation devoutly to be wished.

These thoughts and views are strengthened by the position in the Balkans, Italy, and the Dardanelles. The Turks are nearly broken. Their army in the Peninsula is all but hemmed in, and to-day, supplies to the army can only be got through with difficulty. The Turks have at last realized that the Germans are their masters and that their fate is sealed. It is absurb bluff and swank for the Germans to intimidate Bulgaria, Roumania, and Greece. These countries are not to be hood-winked like the Turks have been. Trust them to side with the countries that are fighting for right and civilization. They know full well who is going to come out on top in this wicked and bloody business.—Thos. B. Neale.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Empioyment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted-Lumber

Quotations on two car loads 1-in. mill run Cedar delivered at Gravenhurst.

DITCHBURN,
18-19 Box D, Gravenhurst, Ont.

Basswood Wanted

No. 2 Common and Mill Cull. Winter cut preferred. Apply Firstbrook Brothers, Ltd., Toronto, Ont. 7-tf

Slabs and Edgings

Slabs and Bundled Edgings, Hardwood and Softwood. Quote cash prices. Box No. 248, Canada Lumberman, Toronto, Ont. 19-22

Wanted

To buy, some No. 1 Cedar Ties. Apply Box 242. Canada Lumberman, 347 Adelaide Street West, Toronto. 17-20

Wanted Lumber

Soft Elm, 1½ in., 2 in., 2½ in., 3 in., 3½ in., 4 in.; also Birch 1 in. and 1½ in. Describe fully with lowest cash prices to Standard Hardwood Lumber Company, Owen Sound, Ont. 19-t.f.

Spruce Timber Tract

Wanted a large tract of Spruce timber, must have good location for sawmill or would enter into contract for the delivery of not less than four million feet of logs a year to a point on a railroad where I could locate my band mill. Box 247, Canada Lumberman, Toronto. 18-19

For Sale-Lumber

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

About 1,000,000 feet if Hemlock, cut August 1914, well manufactured and carefully taken care of. Write for sizes and price to The Wm. Cane & Sons Co. Limited, Newmarket, Canada. 17-20

Lumber

Will sell cheap, all or part of one of the following, or consider Milling or Loan. 700,000,000 feet on large river near Vancouver; 50,000,000 feet on G. T. P. near Prince Rupert; 40,000,000 feet near Pitman, B.C. on G. T. P. Owner, 1755 13th Ave. E., Vancouver, B.C. 19-19

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.

375 Pieces 1 x 15 and up 24 ft. Cypress.

Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

Wanted-Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

Woods superintendent wants position, twenty years' experience with teams and railroad equipment of all kinds. Pine, Hemlock and Hardwoods. All kinds of ground. Will go any place. Can furnish good references. G. O. Sharp, Reynoldsville, Pa. 19-22

"Jim the Penman" The Fastest and Most Accurate Expert Timekeeper and Woods Acc't.

Fresh from largest machine skidding job in N. C. Also 10 years' experience in Northern Camps. A1 references. Handle time, technical logging costs, pay roll, etc. Sober. Married. Prefer large corporation. Answer to home.

JAMES L. HARVEY,
18-19 835 Hope St., Providence, R.I.

Wanted-Machinery

Wanted

One Second Hand Resaw, must be in first class condition. Will pay cash. The Field Lumber Company, Limited, Field, Ont. 18-19

Wanted

Patent Snow Plow, suitable for five-foot sleighs. Must be in reasonably good condition. State make, how long used and best cash price.
18-19 Box 392, Huntsville, Ont.

For Sale-Machinery

Sawmill Equipment

FOR SALE.—One No. 2 Garland Carriage with track, patent set works, friction receder and off set, suitable for 10 in. or 12 in. steam feed. This carriage will be shipped in first-class order.

One Steel Boiler, 75 h.p., nearly new. 75-ft. of 26-in. stack.

One 50 h.p. slide valve Engine.

One 75 h.p. slide valve Engine, Whitlaw of Woodstock, with pulley fly wheel 11 ft. diam, 16 in. face. These engines are in first-class condition. Prices and terms on application.

The Stone Lumber Company, Limited,
19-20 Marksville, Ont.

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.

1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3½-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Saw Carriage

One No. O "E. Long Mfg. Co." Right Hand Saw Carriage with separate 20 ft. Trailer, total length 37 ft. Saw Frame with Top Saw Rig, Cable Drive Attachment. Complete. Used only a few months, bargain for immediate purchaser. Williams and Wilson, Limited, Montreal, Que. 19-19

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Business Chances

Wanted

Mill by contract. Hard or soft wood. Bank and efficiency references. Box 235, Canada Lumberman, Toronto. 16-19

Miscellaneous

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including.—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

To Lighten the Planer Load

The subject of how to lighten the load or power requirements of a planer is offered by way of diversion from the more generally discussed subject of how to make the planer do more work, even though it pulls harder, and in many instances information on this point should prove valuable to users of planers. There are many operators of plain surfacers who have only limited power at hand with which to drive them, and with these it is often quite an item to lighten the burden of work so that it may be done with the least practical amount of power.

Take the ordinary two or four-knife cutterhead, and if the knives are ground rather blunt and are operated for a long time before changing, they pull very heavily. The way to lighten this load is to grind the knives frequently and grind them thinner, with more bevel. That is what makes light cutting and lessens the power requirements for driving machines.

Of course, it should be borne in mind that there is a difference between lightening the load and doing the smoothest work. Getting the smoothest work is often secured by making as short a bevel as the machine will stand, then keeping the knives on the head some time. In the course of using and whetting down to an edge, imperfections in setting are corrected so that all knives cut more nearly alike and a better finish is secured. To follow this idea to an extreme, however, means making the planer pull heavily. On the other hand, following out this idea to the extreme thin grinding of knives, makes the planer inclined to cut a little wavy, unless it is nicely balanced. T. M. C. in The Woodworker.

According to Industrial Commissioner Darling, of New Westminster, B. C., an order for 18,000,000 feet of lumber, of which at least 40 per cent. is to go to Fraser Valley mills, has been placed by the British Admiralty in British Columbia quite recently. This report was made at a recent Board of Trade meeting and was tinged with a note of optimism which has been foreign to the lumber industry for some time past. Big crops in the northwest, together with a sufficient number of bottoms, being guaranteed by the United Kingdom were big factors in the brightening of the horizon.

One of the most important timber land deals that has been put through in New Brunswick for some time is just now being completed and involves the transfer of the entire holdings of Timothy Lynch & Co. on the Miramichi, controlled by the estate of the late Mr. Lynch, says a Fredericton, N. B., despatch. The purchasers are Frasers, Limited, also of Fredericton, and the property thus being transferred includes 122 square miles of crown lands which T. Lynch & Co. have held under license as well as mills and private lands on the Miramichi.

Mr. G. A. Morrison, Londonderry, N. S., one of the oldest citizens of that place passed away recently. Mr. Morrison, or Squire morrison, as he was generally called was in his 78th year and was widely known among the lumbermen of Nova Scotia. In his earlier days he was engaged in farming and lumbering and was appointed a Crown Land surveyor, in which capacity he surveyed much of the land in his township and surrounding districts. For many years he occupied the position of Justice of the Peace.

Miscellaneous News of Interest to Lumbermen

James Alfred Clark, for many years engaged in the manufacture of lumber at Carleton, N. B., died recently at St. John.

J. R. Booth, Jr., a grandson of John R. Booth, the prominent lumberman of Ottawa, has volunteered as an aviator to go to the front. He will be accepted and has already commenced training.

The Restigouche Boom Company, operating on the Restigouche River, N. B., is still at work rafting last winter's cut of logs. It is expected that the season's work will be completed about the middle of October.

Reports from Pictou, N. S., state that more lumber is being shipped out of Pictou this season than ever before in the history of the port. The harbor has been continually full of barques, mostly Norwegian, loading lumber as rapidly as possible.

The body of the late John Dawson, Campbellton, N. B., who disappeared last fall was recently found near the mouth of the Kedgewick river. The late John Dawson, who was in his fiftieth year, was a well-known lumber operator on the Matepedia.

A Victoria, B. C., message states that timber killed by forest fires five years ago is being shipped to match factories in the United States for use in manufacturing matches. Other heavy shipments of poles and timber are also being sent to the United States.

The Colonial Lumber Company, of Pembroke, have sold all of their cut this season to Skillings, Whitney and Barnes, of Ogdensburg, N. Y., and are consequently very busy just at present. Their mills are operating day and night.

Mr. M. J. O'Brien, of Renfrew, the well-known lumberman, who was operated on in the Royal Victoria Hospital, Montreal, for peritonitis, about three weeks ago, is making rapid progress toward recovery. He will be able to leave the hospital shortly.

A despatch from Portland, Oregon, states that 16 vessels, capable of handling an aggregate of more than 20,000,000 feet of lumber are under charter to Comyn, Mackall & Company of San Francisco, to load fir at Portland and Puget Sound for South Africa, the west coast of South America and Australia.

The Maple Leaf freighter Buenaventura, from New York via the Panama Canal, after discharging her cargo at the Evans Coleman wharf early in May, took on board 300,000 feet of lumber from scows, this quantity representing parcel shipments made by several mills to consignee in the United Kingdom.

Mr. H. P. Brierley, former yard foreman for the Long Lumber Company, Hamilton, Ont., has been obliged to take a rest for the sake of his health, and has gone to the Minnewaska Sanitarium at Gravenhurst, Ont. His many friends will hope to learn of his being restored to good health in the near future.

A recent cable from London, England, states that Mr. H. R. MacMillan, who is making a tour of the world in the interests of the Canadian timber industry, left London recently for South Africa. He reported considerable success in connection with his work in Great Britain. After South Africa Mr. MacMillan will proceed to India, Japan and Australasia.

The charter rate for vessels from Pacific Coast ports to Australia appears to be still on the up-grade. The schooner Willis A. Holden was recently chartered by the Port Blakeley Mill Company to load lumber for either Melbourne or Sydney. If she goes to Melbourne the rate will be 107s. and 8d. per thousand feet, while the rate to Sydney is 97s. and 6d. Both rates are records.

The program of the Annual Forestry Conference of the Forest Protective Organizations Composing the Western Forestry and Conservation Associations, with State, Federal and British Columbia Forest Interests, which is to be held in San Francisco on October 19th and 20th shows that the Conference will be an exceptionally important one. A number of addresses by men of long experience will be delivered, covering a wide field of practical subjects.

At a recent meeting of the Mountain Lumber Manufacturers' Association it was decided to re-establish the Lumber Credit Bureau formerly maintained by the Association. In addition to a mill inspector, a prairie inspector with headquarters at Calgary will handle grading matters brought up for decision between sellers and buyers. The object is to make the grades as uniform as possible and, by a system of reinspection on the prairies, gradually eliminate most of the complaints regarding the grades.

Sir George H. Perley, Acting Canadian High Commissioner. London, England, cabled on September 8th to Sir George Foster, Minister of Trade and Commerce, Ottawa, as follows:—"The Office of Works, London, England, has intimated that it will be prepared to consider offers of timber f. o. b. for hutting and trench work. Particulars as to sizes are on the way by letter to the Department of Trade and Commerce." We hope to be able to publish these particulars in our next issue.

An interesting shipment of shingles is reported from Vancouver, B. C. Mr. Geo. E. Walton, of C. Gardner Johnson and Company, Vancouver, reports that the Norwegian steamer Admiralen has been chartered to take a cargo of shingles from the A. P. Allison mills, Green Point Rapids, to New York by way of the Panama Canal. The particular interest in connection with this charter is the fact that the mill dealt direct with the purchasers, there being no middleman.

The British freighter Grahamland, which was formerly a German freighter known as the Josephene, and which was captured by Great Britain shortly after the outbreak of the war and lent by the British Admiralty for freighting purposes, recently cleared from the Canadian Puget Sound lumber mill wharf at Victoria, B. C. She carries 1,250,000 feet of lumber which has been sold to United States parties. She is now on her way, by way of the Panama Canal, to Great Britain.

A prominent lumberman from Bangor, Me., recently expressed the opinion that the lumber cut on the St. John river during the coming winter will be 40 per cent. less than normal. The same authority, who is interested in large timber holdings in Northern Maine, states that last year's decrease was about 25 per cent. Although operators ought to be getting under way now, he says, thus far he knows of none who have commenced operating. Possibly they were waiting for the mill men to indicate what their requirements would be, but at this time in other years the camps had usually started.

Under the direction of the Hon. the Minister of Lands, an attractive pamphlet entitled "British Columbia Timber" has been prepared for distribution among the buyers in overseas markets. It is intended to draw the attention of importers overseas to the forest products of the province, and especially to the facilities for exporting British Columbia lumber. Consisting of nearly forty pages, and containing nearly thirty illustrations, the pamphlet treats of the principal exportable woods, their qualities and uses, together with information concerning their strength values, and suitability for various uses.

The International Joint Waterways Commission held a meeting recently at Kenora, Ont., during which considerable evidence was taken in connection with the effect which certain levels would have upon the navigation of the Lake of the Woods. Lumbermen operating in the district are closely interested in this matter. Mr. D. McLeod gave evidence as to the extent of the lumbering industry of the district which is dependent upon navigation, and referred especially to the higher cost of towing and the increased loss of logs resulting from low water conditions. He also pointed out the detrimental effect that low water would have upon the new pulp industry which is about to be established at Kenora.

The Minister of Lands of British Columbia reports that signs of improvement are visible in the lumber industry on Vancouver Island. Shingle mills are busy with orders from the United States side and from the east. Seventeen lumber mills are returned as operating, in addition to five working periodically, while seven shingle mills are in operation. There are ten logging companies with camps open, in addition to various small operations. The earlier part of the year saw much cleaning up of logging slash. In the agricultural districts much land has been cleared, and many of the larger slashings disposed of, while public opinion, alive to the dangers of fire, has undoubtedly aided the forest guards.

John Harrison & Sons, Co., Ltd.
Owen Sound, Ont.

Three Saw Mills and well equipped Planing Mills in Georgian Bay district.

Nine Million feet Pine, Hemlock and Hardwood in Stock.

Special:—

300,000 feet bone dry No. 2 Common and Better, 6/4 Birch, good widths.

Ties, Posts and Shingles, side and end Matched Maple Flooring. Try us once.

J H & S Co

Review of Current Trade Conditions

Ontario

It is a difficult matter to report anything new regarding lumber trade conditions in Ontario. A canvas of a large number of firms brings out the unanimous report that the actual volume of trade in progress is exceedingly light. It is especially gratifying to learn however, that the production of shell boxes has become so expensive and has been so thoroughly divided up throughout the country that its effect is becoming wide spread and beneficial. It would probably not be saying too much to state that a very considerable proportion of the stocks now moving in Ontario are going into shell boxes. An interesting illustration of the effect produced by this situation is afforded by a case with which many Ontario lumbermen are familiar. A certain large manufacturing firm which consumed extensive quantities of lumber, recently found itself in financial difficulties and called a meeting of its creditors. Very shortly after calling the meeting however, they managed to secure an order for a large number of shell boxes and their certain profit upon this order was so satisfactory that instead of going into liquidation they are working night and day and are contemplating the erection of an enlarged plant.

So far as building operations are concerned we have nothing to report. The old conditions still prevail, characterized largely by absence of new undertakings. This is indicated rather clearly by the situation in the hemlock market. Retailers report that most of their sales are of materials for small alterations or improvements and that they are selling little or no hemlock, indicating that few building operations are under way.

One of the most successful manufacturing districts in Ontario, during the present year, has been that along the North Shore of Georgian Bay. Saw mills in this district have been fortunate in having quite a good demand from the United States and also in being able to give quick and satisfactory delivery, by water, to large United States markets. Manufacturers are now well under way in the preparations for the forthcoming logging season, and while operations will naturally not be on an extensive scale, most manufacturers are counting upon fairly good cuts. A year ago, on account of the uncertainties arising out of the war, the banks discouraged logging operations throughout the country. This year they are treating the manufacturers more reasonably, according to several reports which we have received. In fact, we are told that, while not encouraging excessive operation, the banks have come to realize very fully the great necessity for keeping organizations intact and for doing whatever is necessary to produce such stocks as will be required, and to enable manufacturers to operate sufficiently to cover their running expenses and avoid shutting down their extensive plants.

Eastern Canada

At St. John, N. B., the lumber trade is practically at a standstill, with very little actual movement of stock and also with the probability that, during the coming winter, St. John firms will reduce their woods operations materially. Freight rates remain very high, space has recently been taken at 152s. per standard for winter sailings. No reports of sales of deals for 1916 have yet come to hand. At present, seven of the St. John mills are sawing; two for the United States and five for the English market. Stocks of English deals are light. Lath are steady at about $2.50 per M. on the wharf at St. John. Shingles show no change. In Montreal there is considerable activity in connection with the shell box trade. Exports to Great Britain continue on a fairly extensive scale, but there is still a great shortage of tonnage.

The lowest quotation on eastern spruce at Boston is $23. Some mill men are asking $23.50 and the indications are that this will be the base price throughout the market in the near future. Trade conditions in connection with random are more satisfactory. Producers do not seem to be so eager to move their stock. There is a better enquiry for 2 x 3 and 2 x 4, and the majority are now asking $20 for 2 x 3 and $21 for 2 x 4. There is a firmer price also for 2 x 8, $22 being the lowest and some producers wanting more. The call for 2 x 6 and 2 x 7 is fair, the price ranging from $19.50 to $20. The demand for 2 x 10 at $23 to $23.50 and 2 x 12 at $23.50 to $24 is quiet. The market for hemlock at Boston is still dull. Recent reports state that some mills, which were quoting $24 on eastern hemlock boards, clipped, 10, 12, 14 and 16 feet, a year and a half ago, are now offering at $19.50, and, in a few cases, $19 and $19.25. The shingle market at Boston is quiet. Fairly good white cedar extras are offered down to $3.15 and some very choice ones can be had for $3.40. Red cedar extras range from $3.10 to $3.50 according to quality. On white cedar clears the range is about $3.70 to $3.80 and second clears $2.25 to $2.40. Lath are stiffening a little. Some producers are quoting $4.15 on 1⅝ in. but car load lots are still available at $4.10. For 1½ in. the range is $3.55 to $3.60.

United States

Throughout the United States the lumber business continues very quiet, notwithstanding the fact that many conditions are presented which, in ordinary times, would result in a large volume of trade. The fall trade has not opened up as many hoped that it would. In the great agricultural territory, north of the Ohio river from the Alleghenies west into Oklahoma, Kansas and Nebraska, the demand for lumber is not heavy, although it is showing a slight increase week by week. When trade in this territory is quiet, it makes little difference what is doing in other parts of the country as it invariably sets the pace for the lumber business. The farmers, even in those districts where they have had phenominal wheat crops, are not, as yet, coming into the market for lumber to any great extent. In most districts the farmers are still too much concerned with saving their crops, to enter the market with any activity. It is not to be expected now, that there will be a normal fall business. The general feeling is that the requirements of the farmer will have to be filled next spring instead of this fall. Fortunately, the farmers are in an excellent position to satisfy all their desires for improved buildings, and are reasonably certain to buy lumber when they can get their arrears of harvesting work cleared up. Unfortunately, this will not be in time to develop a large trade this fall. It appears fairly certain however, that the trade this fall will show a gradual increase.

Throughout the south Atlantic Coast district there is abnormal activity. Such States as Georgia and Florida are the natural source of lumber supply for the northeastern manufacturing States, and these States are enjoying almost unprecedented prosperity, because of war business. It is reported that the South Atlantic Coast mills are only limited in their shipments by their mill capacity. The market for southern yellow pine generally is steadily but slowly improving and prices are firming up. There has been a noticeable increase during the past fortnight in the demand for railroad material. The business is spread out from one coast to the other and is of fair magnitude considering the conditions which prevail. The export trade is quiet and light.

In Chicago, the trade shows some improvement. There is an increasing demand from woodworking industries. It is interesting to note that consumers in practically every case are calling for immediate shipment, indicating the low condition of their stocks. Building activity continues on a fairly satisfactory scale. There is a fair demand for pattern stock in the low grades of northern pine. The price remains firm. Improved trade conditions are reported for hardwoods at Chicago, there being a more active demand, with indications of a continuation in the movement. Plain oak is very active and the enquiry for quartered white oak is better. There is a steady enquiry for birch. Basswood and maple are moving freely. The demand for hemlock is gradually increasing at Chicago, but prices are still low. At Buffalo, there is a little better demand for northern pine, particularly in the upper grades. There is improvement in the demand for pattern lumber. Building lumber is rather slow on account of competition from cheaper woods. The demand for low grades is fair and box stocks are moving steadily. At North Tonawanda, northern pine dealers are more optimistic than they have been for a long time. They are unanimously convinced that the demand for northern pine is stronger all along the line.

Great Britain

The spot market at London continues active, but is seriously handicapped by the shortage of men for handling stocks at the docks. Fresh arrivals have been numerous. Stocks of battens on the docks are heavy. Plank and deal sizes however, are bringing very high prices and are scarce. The quantity of spruce on hand is large and is in good demand for many kinds of boxes. With the strong demand now prevalent the outlook is that no more stocks will be on hand than are required until next open water. Deliveries at London docks continue to show great increases over last year. For the week ending August 28th, for instance, the total was 8,065 standards as compared with 3,617 standards during the corresponding week of last year. At Foy, Morgan & Company's recent auction sale, spruce 3 x 10 in. u/s from Botwoodville sold at £18 10s., 3 x 9 ditto and St.

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

John £17 and 5th Quebec at £15 15s. 3 x 8 in. u/s Botwoodville brought £16 10s. and 5th Quebec £15 5s. 3 x 7 u/s Botwoodville sold at £16 10s. and 5th Quebec at £15 5s.

At Liverpool, trade shows some improvement, but is still considerably hampered by the difficulty in making delivery up country. The spruce deal c. i. f. market is very strong. Shippers' quotations for cargoes, namely sailers in passage or loading, are much firmer than they were a short time ago. Agents are not accepting recent prices, but are putting their goods into stock unless they can obtain the values asked by the shippers. The approaching end of the season, and the high cost of freight fully justify this policy. Current c. i. f. quotations do not show a profit and it is therefore necessary to place goods in stock if shippers expect to make anything out of their operations. The indications are that c. i. f. values will continue to advance. Reports state that liners have refused 150s. per standard, knowing that they can obtain something more profitable.

Spot values are heavier. The advance which is now under way is likely to continue until next season. Such lines as 2½ in. x 7 in., 3 in. x 8 in., 10 in. and wider, deals are very scarce and prices are advancing. Higher prices are also expected for 3 x 4 in. Spruce deals from New Brunswick and Nova Scotia continue firm and have exhibited further advances. There are about 14,000 standards now on the quays, but a large portion of this has been sold. Shippers of spruce deals continue to offer further supplies through their brokers and are asking high figures. Birch c. i. f. values are very firm with an upward tendency. A fair amount of business has been done lately at high prices, but not too high when one considers the high freight rates. Further advances are not unlikely. Birch spot values continue firm and the demand is good. The consumption is well maintained. Recent arrivals are almost all going from the quays and actual stocks are likely to diminish considerably. During August 34,000 cubic feet of birch logs arrived against none in August 1914. The consumption for the month amounted to 216 cubic feet, more than four times the figure for the corresponding period of last year. Enormous imports of birch planks are reported and the consumption in August was double that in 1914.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Firms Will Not Take Out Many Logs This Winter

St. John, N. B., September 20th (Special to the Canada Lumberman):—The lumber business at St. John is practically marking time. Very little stock is moving and trade will probably remain in this state until winter liner sailings. Business is said to be fair on the English side, but freights remain as high as ever. Some space has been taken at 152 shillings for winter sailings, but only in limited quantities. No sales of deals for 1916 have yet taken place and if no change for the better takes place in the trade in the near future, very little logging will be carried on this winter. The manufacturer will not be able to cut his logs as cheaply as a year ago. Although labor may be somewhat cheaper, supplies are higher. Therefore the manufacturer will have to get as good a price as in 1915; otherwise it would be unprofitable to do any business and manufacturers are not taking any more chances than possible at the present time. Seven mills are sawing at present, two for the United States market, the rest for the English market. Stocks of English deals at the mills are light, and will not be very heavily increased this fall, as, always during the fall, the mills saw pine for a month or so. This cuts down the output of spruce materially. Locally, conditions remain the same as before. Very little business is to be had, and that at cut prices.

Coastwise vessels are asking $3.50 to New York and $3.00 to Boston, but cargoes are not much in evidence, manufacturers preferring to hold, rather than sacrifice. Lath are holding at about $2.50 on wharves at St. John.

Shingles are unchanged. Staves and heading are moving very slowly.

Shell Box Material in Demand at Ottawa

Ottawa, September 22 (Special to the Canada Lumberman):—In the last two weeks there has been a considerable increase in the demand for low grade box lumber and spruce for shell boxes, but the extra demand has not yet affected the prices, which are the same as those which prevailed prior to the commencement of the war, nor is there likely to be any alteration in the price figures unless the demand becomes abnormal, a circumstance possible, but highly improbable. There has been an improvement in the shipments of lumber from this district to the United States lately, but trade in that direction is still considerably below normal. From that country several inquiries and orders have come recently for box lumber. Over there, as in Canada, the demand for boxes is coming from factories where war munitions, such as shells, etc., are being made.

There has been an advance of as high as 20 shillings per two thousand feet in the ocean freight rates on lumber to England this month, making the rates now around 165 shillings compared with around 40 shillings prior to the war. On top of these high rates is the war and marine risk of about two per cent. of the value of the cargo. With such profitable rates to shipowners in effect it is difficult to get boats and it is going to be still more difficult to get them now that the export of grain has begun. The ocean rates on grain from Montreal to Liverpool are now 33 cents per bushel, where in times of peace they were about six sents. Lumber exporters feel that the government should not confine its energies to getting boats for the grain cargo when the lumber industry in Canada represents in capital and labor more money than is invested and involved in all other industries put together, the grain business included. Tramp boats are turning down offers of a general cargo, it is said, so that they can be bought up to take grain, now a very profitable class of freight. However, in spite of these militant factors against the export lumber trade, there have been several substantial shipments sent forward from this district lately.

Indications that Canadian lumbermen may find a market in Denmark, Greece, Holland and other neutral countries, may be taken from the fact that several inquiries have been made here recently from buyers in those countries, whose former markets have been cut off or interfered with as a result of the war. Lumbermen in the Ottawa Valley would be able to meet a big volume of orders from new markets, and of course would be glad to get them, as all stocks are heavy, much heavier than they have been for a few years.

Supplies for camps in the bush are this year much cheaper than they were at this time a year ago. For instance oats are cheaper now by 25 cents per bushel; hay, $3 per ton; pork $7 per barrel, flour $2.50 per barrel, sugar $1 per 100 pounds, than in the fall of 1914.

Montreal Trade Busy on Shell Boxes

Montreal, September 24th (Special to the Canada Lumberman):—The only section of the lumber market showing any activity is that concerned with the supply of material for making shell boxes. Boxmakers are very busy on these orders, and practically every firm has received contracts. The specifications are very strict, and the box factories have the utmost difficulty in securing the proper birch and spruce lumber. This is very scarce, owing to the amount which has been consumed, and also, to the fact that manufacturers have been sawing their spruce lumber into deals for the English market. A considerable quantity of the stock required has been sold to the United States for shell boxes. Many inquiries for this lumber have been received from over the border and also from various parts of the Dominion. Firms making boxes have already taken up with the Shell Committee the matter of altering the specifications, and in some respects these have been modified.

There is little to report in the veneer department, owing to the dull condition of the furniture and allied trades.

Shipments to the United Kingdom continue to go forward at a satisfactory rate. Exporters, however, could use more tonnage than is available. Rates are still high. Arrivals of late have been very numerous, and one day there were 33 vessels loading, ready to load, and waiting for cargoes. This is the largest number of ships, and the greatest loading capacity known in the port, with one exception, in August last year. These vessels were mainly for Government transport purposes, and did not help the lumber shippers.

The contract for the construction of the St. Francis River dam, designed by the Quebec Streams Commission, has been let to Mr. George Madden, of Quebec, for $101,027. There were 17 bids. This dam, which will have a log slide, is of great importance to lumbering interests, as it will facilitate log driving and also give increased water power to the lumbering companies interested in hydro-electric developments. All the users of power on the St. Francis river are to pay the Government for the additional power created by the storage dam, so much per horse power, and the Government have estimated that the revenue so received will be sufficient to pay interest, sinking fund and maintenance on the investment that they propose to make.

J. & D. A. Harquail

Company, Limited

Manufacturers of Lumber

Extensive New Brunswick and Quebec timber limits, abundant with Virgin Spruce, Pine and Hardwoods.

Twenty years' experience in Milling and Manufacturing, together with a practical knowledge of Building and Architecture, is why our Customers tell us that the Dressing, Grading, and Manufacture of our Stock is just a little better than they expected.

Large stocks of 1 in. Spruce Lumber always on hand.

Try a car of our Air-dried Dressed Spruce.

We also make a Specialty of Kiln Dried Stock.

Our personal attention given to every detail.

Write, wire or phone us for quotations.

Established 1894 ***Incorporated 1908***

Campbellton, New Brunswick

Inconsistencies of So-called Fire-Proof Experts Exposed

BY JAMES P. WHISKEMAN, C.E., ADVISORY EXPERT FOR THE NEW YORK STATE FACTORY COMMISSION

About five years ago nine houses were built, including the one I live in, and according to the advertising literature and the sign boards they are all absolutely fireproof. The walls, partitions and doors are built of terra cotta. The roofs are built of wood construction covered with tin and tile. The trim is wood. The floor covering is wood except in halls, kitchen, pantry and cellar which are cement and compolite. The stairways are unenclosed. The houses are detached and semi-detached. The windows, of which there are a great many, are wood glazed with thin glass.

Despite the alluring advertisements only one of the houses has been sold and two detached ones rented. The others remain idle although the location is ideal, next to a park in a private house neighborhood. The owner was finally compelled a few months ago to let them go to the mortgagee. The reason undoubtedly is that the form of construction is expensive and purchasers can not be found to pay the high prices or tenants the adequate rental.

The advantages gained by the so-called fireproofness of the houses are slight, because in reality the houses are not fireproof, having, as above outlined, open stairways, unprotected window openings and wood roofs. If ordinary construction had been used and the stairway enclosed in fire resisting material some advantages would have been gained. Unless stairways are properly enclosed and all openings provided with fire doors and windows, the advantage of fireproof construction is lost.

Edward F. Croker, former chief of the New York City fire department, recently built a house of fire resisting material, and upon completion invited a number of guests to dine. Before sitting down to dinner he started a fire in one of the bed rooms filled with furniture, closed the door and while the dinner was being served the fire burned itself out without spreading to any of the adjoining rooms. To apply this object lesson successfully to any portion of the house, since fire is no respecter of location, it would be necessary to have all stairways enclosed with fire-resisting material and self-closing doors at the openings, and all the other rooms would have to have self-closing doors. In Mr. Croker's house the windows have metal frames properly glazed.

Judging from an architectural standpoint a house built along such lines would not be sufficiently attractive or homelike to meet the requirements of modern society and would likewise be costly. I believe Mr. Croker's idea can be carried out successfully from a fire prevention standpoint, but the operation would not be commercially successful. The average residence is supplied with sufficient fuel in the furniture to make a considerable fire and nothing short of what is above specified as being necessary could prevent a fire spreading.

No Absolutely Fireproof Houses

I have had considerable experience with so-called fireproof house construction, including some very large ones, and have never yet heard of, nor seen, one that could be called absolutely fireproof. Owners and architects who build and design large houses will not sacrifice the very essential architectural feature for the sake of fireproofness. I have never seen the stairways enclosed, the doors self-closing fire doors and the windows self-closing fireproof windows. The large open stairwell especially is considered a most essential architectural feature. These houses are, therefore, only partly fire resisting, in that the floors, partitions and walls may pass through a fire without being destroyed, although it is more than likely they will be badly damaged.

An architect friend of mine told me a few weeks ago that while he was working on the design of a large country house he was called up by his client on the phone, who said: "As I stand here talking to you my neighbor's house is burning. Make my house fireproof." With all due respect to my architect friend, who was no doubt acquainted with the essential elements of design necessary to fireproof construction, he gave his client a house with incombustible walls, partitions and floors, but stopped there, knowing quite well that he could not satisfy his client in carrying out the architectural treatment properly and satisfactorily by enclosing stairways, etc.

A large private house that I was called upon to inspect in a nearby State is built of brick, stone and concrete walls and partitions with built up concrete beams spaced 16 inches on centers beveled on the top, between which are supported 2-inch built-up concrete slabs with the usual fill and wood floors. These slabs naturally did not fit tight against the beams, thus providing cracks through which fire might be communicated from floor to floor. There were easier means of communication, however, by means of the usual open stairway.

Iron, unless sufficiently protected by fireproofing material, is not fire resisting and in time of fire may become more dangerous than wood in that it will deflect and fall under the action of fire and pull the supporting structure with it. A great many so-called fireproof houses are built with steel unprotected in the construction or not sufficiently protected to withstand fire. Our theories about the amount and kind of protection that is necessary are being upset every day and we know that the amount of protection largely heretofore used is not sufficient. This was forcibly illustrated in the recent Edison fire.

Outside of the profession few people have the proper conception of what a fireproof building really should be. In the first place, there is no such building. Buildings are only relatively fire resisting. The cost of building an absolutely fireproof structure, especially for dwelling purposes, is almost prohibitive, considering that stairways must be enclosed and all openings adequately protected. In the second place the best fireproof doors, and more especially windows, so far placed on the market, are only temporary protections at best.

Nowadays one hears a great deal against the use of wood shingles for roofs, and during periods of new building code construction particular activity is shown. Most of the advocates for incombustible coverings for roofs likewise overlook the more accessible mode of communication, that is, the ordinary window by means of which fires are communicated from one building to another and from one floor to another in the same building.

Many of the fires in private houses are caused by defective flue construction due to carelessness in design or more often to lack of proper supervision and construction, many of our country houses being built by contractors from their own plans.

The point I am trying to make is that the zeal and enthusiasm of fire prevention experts has led them to root against wood in every manner, shape or form in building construction regardless of cost, forgetting the most essential requirements as above enumerated without which a building built of fire resisting material will not qualify in time of fire, no matter what the construction may be. As time goes on, however, we sometimes profit by experience and whereas wood floors and trim, unless fireproof, were formerly excluded from buildings over a certain height, the best modern practice permits the use of wood flooring and a certain amount of wood trim. At the same time that wood was being excluded stairways, elevator shafts and other vertical openings were permitted to be unenclosed, showing the inconsistency of some of the requirements, while the occupancy of floors was unlimited regardless of exit requirements. Fire prevention experts go through the country preaching fireproof buildings with all the arguments at their command. Some see nothing but fire walls; others the elimination of wood shingles; all are prepared with arguments galore to substantiate their pet theories, only to have a fire demonstrate the weakness of their much cherished ideas.

Every Fire Shows Weakness of Fire-Resisting Material

The dictum that the chain is no stronger than its weakest link is in a measure applicable to fireproof construction as well as to ordinary construction. Every fire of any consequence—and more especially every conflagration—shows up weaknesses in fire-resisting material previously unthought of and modifications are continually made and additional restrictions imposed on account of the lessons learned. No form of fire resisting material has ever gone through a conflagration unscathed. Proper and intelligent design will accomplish better results with less fire-resisting material than can be obtained with fireproof material with the omission of essential features almost impossible of adoption and without which the construction as a whole will be faulty and permit the fire to spread.

If, therefore, it is not found expedient to build private houses with enclosed stairways, and with fireproof enclosures for window and door openings it is under many circumstances quite proper to use wood for floors and trim, and this can be done without unnecessarily jeopardizing the integrity of the structure or the adjoining premises.

From statistics compiled by the United States consuls in Europe some years ago, it was found that the per capita loss in six European countries for a period of five years was 33 cents. The per capita loss of the United States is usually figured at $2.50. Throughout Europe, excepting in Norway and Sweden where wooden construction is prevalent, wooden construction is more or less prohibited in muni-

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cipalities. In the rural districts few wooden buildings are found. This is largely due to the scarcity and high price of lumber in Europe, while in the United States lumber is plentiful, available, cheap and is easily adapted for building construction.

Fire prevention experts and those interested in the promulgation and sale of fire-resisting material therefore draw the conclusion that if wood is eliminated from building construction our fire loss will be reduced to a level with those of Europe. This argument has been so thoroughly drilled into the minds of the public that it has almost become an axiom.

This comparison is erroneous and would be more nearly correct if it were made on a basis of the value of actual property destroyed. It is obvious that since property and the contents of buildings are more valuable in the United States than in Europe this method of comparison upon which the lower European loss argument is based is not fair.

The United States likewise probably has more than three times the number of buildings per same unit of population and therefore is likely to have three times the number of fires. If these facts be taken into consideration the percentage of fires in the United States is only slightly in excess of the European average. I believe it is also true that in European cities where frame construction predominates the per capita loss is about as low as in the cities wherein no frame construction is permitted. We must therefore look for the true reason for this difference in fire loss. An analysis of the tables prepared by the fire authorities in the various cities of the United States, as outlined in the annual reports, shows that considerably more that half, and perhaps as much as three quarters of the fires, can be classed as preventable. No such condition obtains in European countries where the cause of a fire is determined and the responsibility fixed.

How Real Progress Can Be Made

Under all American efforts to check the fire waste now lies the growing conviction that no real progress can be made until the man who has a fire ceases to be regarded as an unfortunate and is looked upon as a public offender. Individual legal responsibility for loss by fire seems a drastic corrective to the ordinary American citizen who believes his neighbors can look out for themselves, no matter how unneighborly his own acts may be, but such restraint must undoubtedly be the avenue through which our absurd number of fires may be curtailed. If every down-town building occupant in New York were answerable financially for any loss to his neighbors caused fire in his property, there would be a stampede for the protection of window openings, and the conflagration hazard of the metropolis would quite disappear.

There is nothing revolutionary in the idea that an individual should be responsible to others for his acts. In other circumstances such phrases come from American lips with sufficient glibness. It is in the application of the principle to fire that it seems revolutionary.

It does not rest with Americans, however, to make primary application of this principle in the matter indicated, for the French have long so applied it with admirable results. There are no special laws in France relating to fire requests, yet an inquiry by the police is made into every fire in cities and towns, and in the country districts by the gendarmerie. The responsibility of a man for fire damage to his neighbors lies not in any special enactment, but in the interpretation of two short sections of the Code Napoleon, which code of laws prevails especially in France and Belgium, and forms the basis for the modern law in most Latin countries:

The sections referred to are as follows:

Article 1382: Every person is responsible and liable for any acts of his by which any other person has or may have sustained any loss, damages or injury.

Article 1383: Every person is responsible for loss, damage or injury caused by his own act, carelessness or negligence.

The responsibility, as it relates to fire, is called in France the "Recours des voisins" or neighbors' risk. It is universal and applies to landlord and tenant alike. If a fire starts in any premises through gross carelessness or culpable fault, all damage done to neighboring property by that fire must be made good. There is no limit to this liability, which may extend to an entire block in case of conflagration. The only point in the application of the law by which such offender may escape is that a burden of proof lies with the neighbor making claim. The latter must be able to prove, before he can recover damages, that the fire was directly due to gross carelessness, culpable neglect or mischievous intent.

There are two articles in the French code which apply specially to fires. These undoubtedly originated with the landlord. They read:

Article 1733. The tenant is responsible for a fire on his premises unless he can prove that the fire was caused by something beyond his control, by some fault in building, or that the fire was communicated by a neighboring building.

Article 1734. If there are a number of tenants all are alike responsible unless they can prove that the fire caught in the apartment occupied by one of them, in which case, he alone is responsible or unless some one of them prove that the fire did not begin in his apartment, in which case he is not responsible.

The responsibility here indicated is called the "risque locatif." The tenant having a fire is responsible to the landlord for loss of rent, not only of his own, but that of other tenants.

The presumption always is that the fire was caused by the act or neglect of the tenant and the onus of proof rests upon him to show that it originated from some structural defect or from some cause beyond his control, before the landlord can be held responsible. A tenant, therefore, must suffer the loss occasioned by some defect in the building or from some other cause over which he had no control, unless he can prove such defect, in which event the entire loss, both on building and contents, and for damage done to neighbors' property, falls upon the owner of the building.

While it is impossible that such laws as obtain in France can be enacted in the United States in the near future, it is certain that the growing popularity of the office of fire marshal in the States of the Union is an indication of the general desire to fix personal responsibility for fires. Such inquests as are made by the fire marshals' offices demonstrate that fully 70 per cent. of fires are due to gross negligence, and the curbing of the carelessness by statutes fixing responsibility would seem to be the logical step.

Real Reason for Greater American Losses

The real reason for this great difference between the European and American loss is therefore to be found in better housekeeping methods. We are more extravagant, more careless and place less stress on the value of property. In Europe furniture is handed down from generation to generation and if it becomes broken it is repaired; in our country we usually throw broken furniture out and buy new when we start out for ourselves. For the same reason in Europe furniture and houses are more zealously guarded and protected from fire; in this country we insure them and let them burn.

To blame the large fire loss in the United States on the excessive use of lumber is therefore an injustice There are circumstances under which frame buildings should not be built and shingle roofs be prohibited. In private house building judgment must be exercised, consistent with all the other circumstances above enumerated. Generalities can not be prescribed governing all cases.

Consular reports show that the great percentage of fires in Europe are confined to the floors where they originate, indicating the zealousness with which the outbreaks are held in control. In Rome, for example, 328 fires in one year were confined to the rooms of their origin. Great stress is likewise placed on the antiquated fire departments. Buckets and fire extinguishers are chiefly used in putting the flames out.

It would be absurd to assume that the fireproofness of buildings in Europe is more effectual than that of our own in resisting flames and preventing their spread. The fireproof structures there can not compare in quality with those in the United States. The low fire loss in the old world countries therefore must be attributed to superior arrangement, the absence of vertical openings and, most important of all, the individual responsibility which induces carefulness and good housekeeping. Incendiarism of which we hear so much and which is undoubtedly responsible for many fires in this country is not known in Europe.

There is no better adjunct of incendiarism than the accumulaiton of rubbish, which until recently was permitted in this country. The other day one of the city inspectors looked my cellar over and reported that the paper and excelsior which were being saved for future packing purposes had better be cleaned out. Upon investigation I quite agreed with him. It is gratifying to note that investigations of this kind are being made. If prosecuted conscientiously, they will be fruitful of good and lasting results and go a great way toward lessening our excessive fire losses. In fact, systematic inspecting of premises, coupled with education along lines of individual responsibility, will solve in great measure our fire prevention problem.

Reports to the Minister of Lands for British Columbia, from the Nelson District, show that sawmill operators are of opinion that, owing to the low stocks now held by many prairie yards, there will be a good demand this fall for lumber. Eight mills employing 250 men are in operation, while half-a-dozen other mills have recently closed down after short runs. One interesting order from the United States, namely, white pine for match stock is being partly supplied from timber killed in the 1910 fire. Seven pole companies are shipping and yarding poles, and heavy shipments are being made to the United States, although at a low price. Until the advent of the prevailing hot weather, the season was exceptionally good for land-clearing and slash-burning operations, much road slash in particular having been cleaned up.

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NEARLY all kinds of fruits are quite high in price this season, but we have some exceedingly good values considering the shortage in some crops and the shipping embargo on others—For instance the Smyrna crop of Sultana Raisins and Figs is bottled up and cannot be shipped out.

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EDGINGS

Ontario

The Nicholson Lumber Co., Ltd., Burlington, Ont., have secured an Ontario Charter.

The Roussel Lumber Company, 78 Nightingale Street, Hamilton, Ont., are putting up an addition to their planing mill at a cost of $1,000.

Geo. Gordon & Company Ltd., Cache Bay, Ont., whose sawmill was destroyed by fire on July 19th, report that in their new mill they will install two double cutting band mills, one horizontal resaw, edgers, lath mills, trimmers, etc. They have not as yet purchased any machinery.

The new plant of the Canadian Pulp and Lumber Company which was built on the site of the one destroyed by fire some months ago, has been put in operation. The company intend to operate night and day in order to catch up with the large stock of pulpwood now on hand.

The Noel-MacKay Lumber Company Ltd., has been incorporated with capital stock of $100,000 and head office at Fort Frances, Ont., to carry on business as timber merchants, sawmill proprietors, etc. The provisional directors are J. P. Noel, J. J. MacKay and A. D. George, all of Fort Frances.

The Kippewa Lumber Company Ltd., has been incorporated with head office at Ottawa, Ont., and capital stock of $50,000 to carry on business as manufacturers and dealers in lumber and timber in all its branches. The company will manufacture pine and spruce at Kippewa where they have secured the mill formerly belonging to Mr. John Lumsden. The president of the company is Mr. Carlton M. Smith, of Buffalo, N. Y., and the directors are Messrs. M. S. Tremaine, Buffalo, W. G. White, New York City, C. E. Read, and F. W. Avery of Ottawa, Ont.

Tenders are being called by Duncan C. Scott, deputy superintendent-general of the Department of Indian Affairs, Ottawa, until Wednesday, October 13th, for the purchase of about 2,000,000 feet of timber killed and scorched by fire, comprising pine, hemlock, birch and cedar, and including 1,800 logs lying in the bush, cut last fall, and some 800 logs skidded by the Indians last winter upon the Shawanaga Indian Reserve in the District of Parry Sound, Ont. Each tenderer must state the amount of cash bonus he is prepared to pay for his timber over and above the following Crown dues:—Pine $1.87½ per M. feet, B. M.; hemlock 75c. per M. feet, B. M.; birch $1.12½ per M. feet, B. M.; cedar posts 2c. each. An accepted cheque on any Canadian bank for 10 per cent. of the bonus tendered made payable to Mr. Duncan C. Scott should accompany each tender, the balance of bonus to be paid within thirty days from notification of acceptance of tender. Two years will be allowed for the removal of the timber. Further information can be had from Mr. Scott or from the Indian superintendent, Mr. Alexander Logan, Parry Sound.

Eastern Canada

The Fraser Lumber Company Ltd., Plaster Rock, N. B., intend to operate in the woods this winter upon the same scale as last winter.

The saw and lath mill belonging to Eddie Lewis, Salisbury, N. B., was totally destroyed by fire recently. The amount of the loss is not yet known and there was no insurance.

Price Bros. & Co., 56 St. Peter St., Quebec, P. Q., recently lost a shingle mill by fire. The loss amounted to $30,000 including 15 shingle machines. The company will be in the market for machinery.

The stock of lumber cut by A. Wiley at his mill at Chipman, N. B., was recently destroyed by fire. The loss amounts to between $4,000 and $5,000, and there was very little insurance. The mill building was saved.

Alvin Veinot, Pleasant River, N. S., recently lost by fire a large quantity of lumber piled near the station at Pleasant River, N. S. The fire is supposed to have started from a locomotive. The stock was insured.

P. H. Renaud, Agnes Street, Lac Megantic, P. Q., will commence work immediately on the erection of his new pulp mill. Work will be done by day labor. The owner will be in the market for new machinery in April 1916.

The Bathurst Lumber Company, Bathurst, N. B., suffered a serious loss by fire on September 22nd. The flames destroyed their dock lumber yard including about 15,000,000 feet of lumber valued at $250,000. The flames were discovered almost at their inception, but a fierce northwest gale spread the fire so rapidly that it could not be controlled. Fortunately the gale, which continued until the fire had burnt itself out, carried all the sparks out to sea. The splendid new dock was absolutely destroyed. The company carried between $600,000 and $700,000 insurance upon their plant and dock, so that the latter is well covered.

Western Canada

T. Z. Smith, Matsqui, B. C., is contemplating the erection of a box factory shortly.

A. B. Cahoon, Cedar Rapids, Mich, visited Vancouver recently to look into the feasibility of establishing a furniture factory.

The Revelstoke Saw Mill Company has taken over the yard formerly owned by the Stritzel Lumber Company, at Empress, Sask.

The Jewell Lumber Company, Hanbury, B. C., and the Bridges Lumber Company of the same place, recently reopened their mills to work upon orders which have been received from the prairies.

The Mainland Cedar Company Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $100,000, to carry on business as manufacturers and dealers in lumber, timber, lath, shingles, sash, doors; sawmill owners, etc.

The Western Timber Incorporation Ltd., has been incorporated with head office at Kamloops, B. C., and capital stock of $500,000 to carry on business as manufacturers and dealers in timber and lumber of all kinds. Those interested are J. C. Shields, D. W. Rowlands, and T. Withington, all of Kamloops, B. C.

The Caledonia Box and Manufacturing Company, Ltd., have been incorporated with head office at Winnipeg, Man., and capital stock of $20,000. The objects of the company are to carry on business as merchants, manufacturers and dealers in timber and wood. Those interested are G. Anderson, T. Gibson, J. Riddell, T. Turnball and R. M. Noble, all of the city of Winnipeg.

Young & Stephenson Inc., have been registered as an extra-provincial company to carry on business in the province of British Columbia as woodworkers, timber merchants, and manufacturers and dealers in lumber, timber, shingles, etc. The head office of the company is at 17-19 Board of Commerce Building, City of Madison, Wis., U. S. A., with provincial office at New Westminster, B. C., and capital stock of $100,000. J. R. Grant, New Westminster, is attorney for the company.

Market for Hardwood in Great Britain

The consumptive demand for hardwoods of all kinds, and particularly those suitable for motor-body building, continues active. So far as the cabinet-making industry is concerned there is some slackening off to record, due mainly owing to the lack of skilled labor to manufacture furniture. Many retail timber merchants have ceased buying until the beginning of next month owing to stock-taking operations. It is quite a custom with many firms in this branch of the trade to balance up at the end of June, because of the long days in which to take stock after business hours. Taking the position of the market, therefore, as a whole there is nothing much to complain about, and the prospect is far from discouraging. Prices remain very firm, as, indeed, they must do until such times as lower freights become an actuality. There is certainly no room for shippers to cut their free-on-cars-at-the-mills prices, because even now these are at a low limit. The bulk of the high prices on c.i.f. purchases are secured by the steamship companies.

A little pause is noticeable in buying on c.i.f. and ex-quay terms. To what extent this is due to the inability of shippers to quote, or the disinclination of buyers to complete contracts, is a matter for conjecture. This much, however, can sagely be said, that the fresh stock lists with prices attached, recently to hand from shippers, show, if anything, advanced quotations.

Arrivals so far as lumber is concerned are moderate, despite the fact that one or two steamers have just reached this port with fair quantities on board.

Low quality black walnut lumber is in better supply, and these fresh arrivals will appeal with interest to cabinet-makers. Meantime, there is nothing special to report regarding prime planks except that stocks are very meagre indeed and prices high.

There is some disposition on the part of shippers to try and push up the prices still further of wagon oak planks; whether they will realize their objective or not we cannot say. Prices are now on a very high level indeed.

As illustrating the cost of fresh supplies of Japanese oak, it is reported that present freight rates are 4s. per cubic foot calliper measure.

Clean, sizable, white ash logs command much attention in this market at satisfactory prices. Prime ash planks are scarce and dear.

Prime Quebec birch planks and lumber are in excellent demand. Prices have had to be advanced owing to higher ocean freights.—The Timber Trades Journal.

It is estimated by well informed lumbermen in Ottawa that the lumber cut in the Ottawa Valley during the present year will be reduced to about 300,000,000 feet. Last year the total was over 450,000,000 feet.

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Dressed as Required, Spruce and Pine—1914-15 cut.

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Roofing P 2 S & Matched—1914 cut.

1" x 4" up x 8/13. Approximately 60 per cent. 12 and 13 ft.

First Quality and Clear Spruce

1 x 4 in. up x 6/13—'15 cut.

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13
3 in x 9 in x 10/13

3,000,000 pcs. Mill Run Pine Lath, 4' x 1⅜ x ⅜—'15 cut.
1,000,000 pcs. Mill Run Spruce Lath. 4' x 1⅜ x ⅜—'15 cut.
500,000 pcs. No. 2 & 3 W. Pine Lath, 4' x 1¼ x ⅜—'15 cut.

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Drawing Dividends Out of Sawdust

Briquetting Process Producing a Fuel for Domestic Use Which Has a Bright Future Before It

By James A. Bryne

The big lumberman of today is confronted with the problem of how to dispose profitably of his sawdust and other forms of refuse. This is only in keeping with the appearance of the waste specialist in all the industries.

Three important factors are determining the commercial utilzation of lumber-mill waste. The decreasing supply and increasing price of available lumber; wider markets for fuel of all kinds; and introduction of sawdust briquetting machinery. It is with the third factor that we propose to go into detail.

It is estimated that sufficient refuse is made in the manufacture of one thousand feet of lumber to produce one ton of sawdust briquettes. The mill that cuts one hundred thousand feet a day finds an accumulation sufficient to make one hundred tons of briquettes daily.

Heretofore in this country the chief use of a proportion of mill refuse has been for fuel purposes. A small proportion of slabs has been sold at retail for domestic fuel. But at most sawmills, great heaps have formed which have frequently represented a considerable expense for mere removal out of the way.

The question of using his sawdust refuse for steam purposes at his own plant must in every case be decided by the lumberman for himself. No two cases are identical. However, in these days of hydro-electric power, of a wider use of petroleum and of gas, there may easily be greater economy in introducing one of the newer sources of power or fuel and converting the mill refuse by means of machinery into briquettes.

On the Pacific Coast, especially in British Columbia, where sawdust briquettes have been manufactured, marked success has attended the innovation. The cost of manufacture varies between $2.00 and $3.50 per ton, including all charges, such as labor, power, binder, depreciation and interest. The market value of the briquettes, where coal is $7.00 a ton, is between $6.00 and $6.50 a ton. The hundred thousand capacity mill equipped with briquetting machinery and affording all its sawdust for briquettes could on its output of 100 tons of briquettes daily, produce a handsome profit of between $300 and $400 a day, and the average loss in the manufacture of lumber is about 20 per cent. This consists of sawdust, bark, slabs, shavings, nut shells, edgings and other forms of refuse. Briquetting plants can be located to advantage at lumber mills, sash and door factories, box and woodenware factories, furniture factories, nut shelling factories, etc.

Machinery

Recently two factories in British Columbia installed sawdust briquetting machinery. A Vancouver company makes machinery both for slack coal briquetting and sawdust briquetting manufacture. No two plants are alike, either in machinery or process. The type of machinery depends entirely on the raw material to be handled, and the process on the nature of the raw material. For instance, the sawdust procurable on the West Coast is not sawdust at all. It is in the form of flakes or shreds of a very light resilient nature. This is due to the light quality of timber, the type of saw used and the greenness of the timber. Such material is hard of compression and must go through some preparatory process to break the resilience. This process in case of wet timber is partly carried out by special dryer, and at other times, depending on the quality of the sawdust, by sawdust grinders.

In the case of oak, mahogany, walnut, teak, elm, and other hardwoods, the amount of preparatory machinery is lessened. The lumber in the first place is cut by finer saws. The sawdust is granular in form, and lies close and heavy in bulk, and the amount of moisture in these timbers is very low.

Thus the preparatory machinery varies considerably. It consists of special forms of grinders, pulverizers, amalgamators and mixers. The raw materials are measured and weighed automatically and are carried up to the various portions of the plant by elevators and conveyors.

The compressing machine, called the Press, is always the same. This press is a patent, especially built for the work. It is capable of wide ranges of adjustment, and wide ranges of pressure. The pressure which can be exerted is from 4,000 pounds to 10,000 pounds per square inch. The cost of such a machine, with an average capacity of 11,000 two-pound briquettes per hour, or 110 tons of briquettes per day, is from $12,000 to $14,000.

Process: Plant at Victoria, B.C.

The wood refuse is first put through a "hog" machine in which it is cut in pieces not more than three-quarters of an inch long. The material is then passed into a shredder, where it is reduced to fine particles from the thickness of a match up to a quarter of an inch. From the shredder it passes into a dry kiln, where it is thoroughly dried, as green particles of wood will not adhere and remain in form, no matter how great the pressure may be. The sawdust, if wet, must be dried to within 10 per cent. to 12 per cent. moisture. The drying is an inexpensive process generally, and adds to the cost of manufacture about 10 cents a ton. From the drier it goes to the heavy compress machine, where it is passed into briquettes, or rolls, three inches in diameter, held together with 7-ply tarred jute string, the only bond used in the briquettes.

Mr. Armstrong, of the Armstrong-Kerr Company, manufacturers of briquetting machinery, tells me that the best binding materials are of the bitumen class, either natural or manufactured, namely, coal tar, pitch, creosote, asphaltum, crude oil refuse or natural bitumen as obtained from Trinidad. Such materials, he says, give life and additional calorific value, as well as adding a binder to the briquette. He goes on: "It is generally necessary to give density to the sawdust by adding coal dust, plastic clay, shales, or fire-clay, the quantity depending on the quality of the sawdust. The use of any one of these materials is optional, and is governed by the cost of the same. The use of plastic clay is perhaps the best when it can be procured at a reasonable price, owing to the fact that clay will retain its heat for quite long periods. It is economically better both to the manufacturer of the briquettes and to the consumer. The use of plastic clay reduced the amount of pitch required. The residue as to total combustion is a fine light dust."

The composition of one form of briquette manufactured in British Columbia is as follows: wood refuse 65 per cent.; coal 25 per cent.; pitch, tar, or oil 10 per cent. The weight is one-third less than that of an equal bulk of coal.

The smallest-sized plant for a lumber mill put up by the Armstrong-Kerr Company would produce 1,100 to 1,200 briquettes per hour of two pounds weight each, rectangular in form, 6 inches by 4 inches by 3 inches.

Serviceability

I have before me a piece of briquette made from elm sawdust, fireclay, and creosote, in a factory at Leeds, England. It is about two-thirds the weight of coal, jet black, with a slightly tarry smell. Briquettes made from hardwood sawdust are both economical and clean to burn. The economical calorific value is about equal to that of good soft coal, of lump grade, owing to the economical way the fuel burns. Unlike coal, it is almost all consumed in the grate, the gas being burnt up before it gets to the chimney, whereas coal, when it reached a certain temperature, gives off its light hydro-carbons and gas rapidly, insufficient air can be mixed with these under ordinary circumstances to consume them, hence they go up the chimney in the form of soot and gas, and constitute a total waste.

The actual calorific value of soft coal as generally obtained for domestic purposes is about 10,000 thermal units to the pound. The calorific value of dry pine sawdust made into briquettes with either slack coal or clay and bitumen is about 7,500 thermal units per pound. Soft coal is rather dirty to burn, both as regards soot and ash. The ash contents range about 10 per cent. in an average sample. The ash contents of a briquette is about 12 per cent. if clay is used, and about 8 per cent. if slack coal is used.

The purposes for which sawdust briquettes are found most useful are: domestic purposes, cooking range, open fireplaces, and furnaces.—Logging.

Advices reaching the Minister of Lands on conditions in the Lillooet District of British Columbia, mention that nineteen fires have been reported this season, the area burned over being in excess of two thousand acres, without appreciable damage to green timber. In most cases campers caused outbreaks through lack of care. The burning and disposal of logging slash this season has been very satisfactory, three hundred acres having been cleared up. In addition many permits to settlers to burn slash for the clearing of land have been granted, and in no case has a fire got away in any area under permit. Co-operation between the forest service and settlers has facilitated clearing operations, while valuable aid has been rendered in the location and clearing of new trails, and the repair of old trails.

The lumber industry is quiet in the Fort George district according to advices received by the Minister of Lands of British Columbia, owing to local conditions; the amount of building now taking place being small. Hopes are expressed that conditions will improve as a result of the market extension movement now on foot. Railway construction having fallen off, there has been a marked reduction in the fire hazard. Under existing conditions, the vegetation is drying up rapidly, and is likely to facilitate the spreading of fires. It is estimated that an exceptional amount of land-clearing will have been carried out this year, as a result of activity on the part of the settlers, and this will have the effect of eliminating many areas which in the past have constituted a grave fire hazard.

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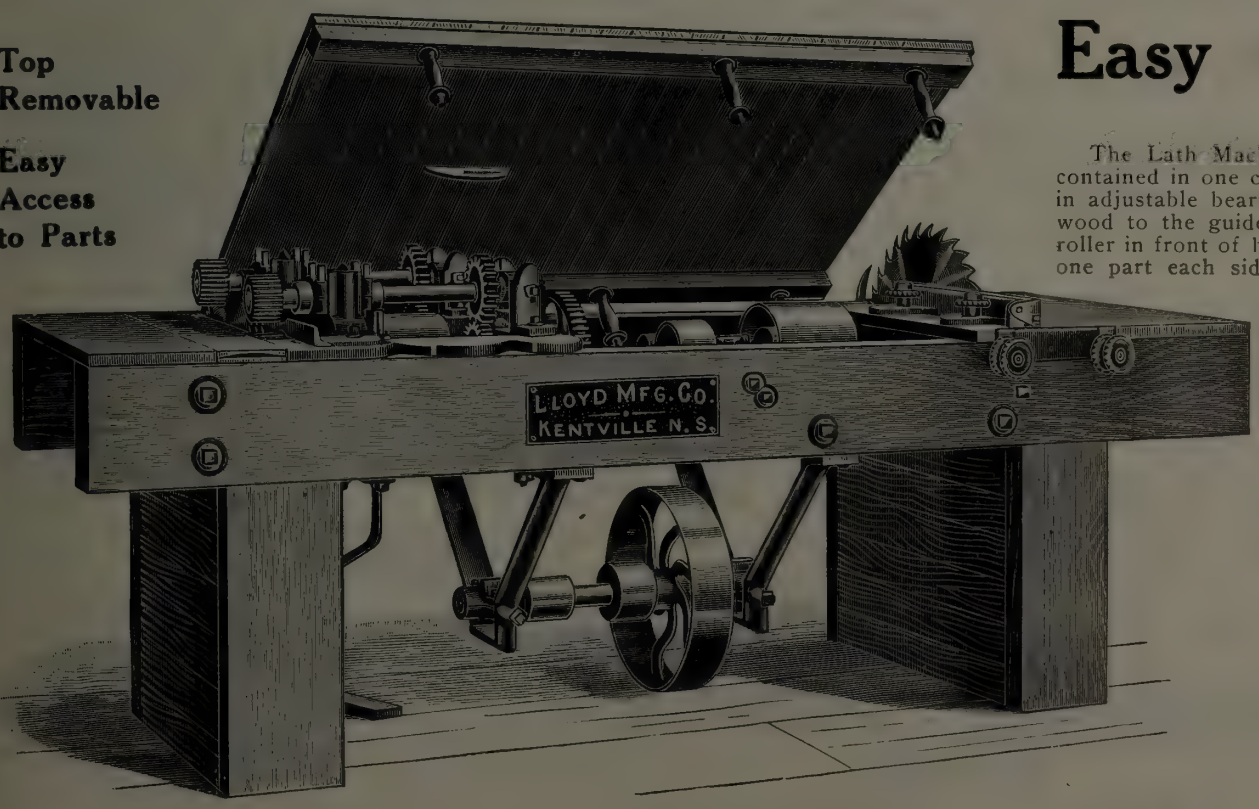

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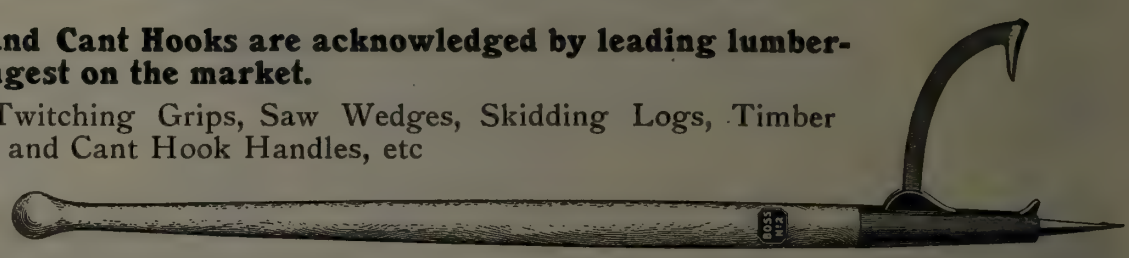

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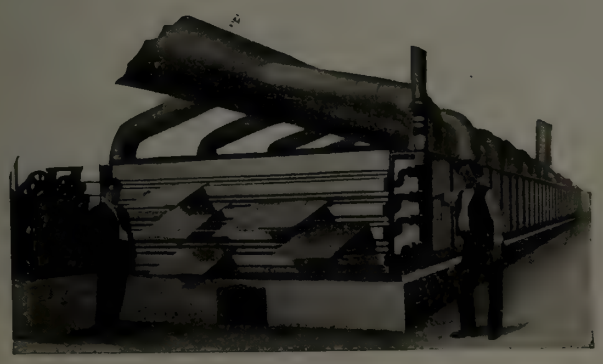

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CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.
VANCOUVER MACHINERY DEPOT, LTD.. VANCOUVER, B.C.

DETACHABLE

Lumber Trucks

For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East TORONTO

INDUSTRIAL LOCOMOTIVES

The designs of our small locomotives are the result of wide experience.

All details are accurately finished to standard gauges and are absolutely interchangeable on all locomotives of the same class and size.

This cuts out long delays when parts wear out, as parts liable to wear can be kept on hand or shipped promptly from our works.

MONTREAL LOCOMOTIVE WORKS, LIMITED

DOMINION EXPRESS BUILDING, MONTREAL. CANADA

AJAX LOADING CHAIN

offers the greatest strength in the smallest chain. The overlapped swelled weld gives a factor of safety which cannot be overlooked. Our steel, too, is of the highest quality, and high in tensile strength and elasticity.

For The Man Who Wants Real Chain Service

AJAX Loading Chain and Standard Conveyor Chain

offer a high mark of quality hard to equal.

Made by

Standard Chain Company
Pittsburgh, Pa.

Montreal
Alexander Gibb, St. Nicholas Bldg.

Winnipeg
Bissett and Webb

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:

1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common.	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00

Hemlock No. 1:

1 x 4 and 5-in. x 9 to 16 ft.	17 00
1 x 6-in. x 9 to 16 ft.	20 00
1 x 8-in. x 9 to 16 ft.	21 00
1 x 10 and 12 in. x 9 to 16 ft.	22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.	19 00
1-in. No. 2, 6-ft. to 16-ft.	16 00
2 x 4 to 12, 10 and 16 ft.	19 00
2 x 4 to 12-in., 12 and 14 ft.	19 00
2 x 4 to 12-in., 18 ft.	22 00
2 x 4 to 12-in., 20 ft.	24 00
2 x 4 to 12-in., 22 ft.	25 00
2 x 4 to 12-in., 24 ft.	26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.	16 00
Clear in B. C. cedar, kiln dried	50 00

Douglas Fir:

Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.	31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.	32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.	32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.	33 00
10x20, up to 32 ft.	33 50
6x18, 8x18, up to 32 ft.	34 00
6x20, 8x20, up to 32 ft.	35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4.	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4.	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet.	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4.	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4.	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
Pine, 1¼, 1½ and 2-in.	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards:		
1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 80 to 85 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E. 6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed)	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00

No. 3 Edge grain $3.00 per M. extra.

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 60)

J. J. TURNER & SONS

PETERBOROUGH, ONT.

Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

A Successful Dry Kiln

Here's what a manufacturer of pianos and organs says of a

Sturtevant Kiln:
(REG. CAN. PAT. OFF.)

"We have two dry-kilns which are operated in this manner, one along side of the other; one in which we place the green lumber that is shipped us, what is usually called shipping dry. This stock is all steamed before the suction fan is placed on it. The other kiln we use for lumber that has been on stick on our yard for from one to two years, and on this we do not apply any steam, simply running it through in about ten days for immediate use. The green lumber, however, in the other kiln is steamed several days and is put through drying apparatus for about three weeks before it is taken out. We have never had any case hardening using this method neither have we had any warping, in fact, we are perfectly satisfied with the results."

We can quote you dozens of cases where our Kilns are giving excellent service.

Talk it over with one of our drying engineers or get catalog 220-C.

B. F. Sturtevant Co. of Canada, Limited

Montreal, Toronto Galt, Ontario, Canada Winnipeg, Vancouver

New RAILS Relaying

12 to 80 pounds per yard.

LOGGING CARS

Jno. J. Gartshore

58 Front St. West, Toronto

Are your horses of use to you?

This seems an absurd question—and the answer is always **"Of course they are"**—In which case provide your stables with:

Johnson's Reliable Veterinary Remedies

Johnson's Horse Liniment, No. 1 (Alcoholic)

1 gal. jugs (Imperial)	$4.50 gal.
1 lb. bottles	8.00 doz.
2 lb. bottles	15.00 doz.

Johnson's Horse Liniment, No. 2 (an oil liniment)

1 gal. jugs (Imperial)	3.00 gal.
1 lb. bottles	6.00 doz.
2 lb. bottles	11.00 doz.

Johnson's Horse Colic Remedy
A sure and speedy cure for all kinds of Colic

1 gal. jugs (Imperial) 40 doses	5.00 gal.
1 lb. bottles 4 doses	8.00 doz.
2 lb. bottles 8 doses	15.00 doz,

Johnson's Veterinary Healing Ointment (Gall Cure)

2 lb. tins	2.00 per tin
4 oz. tins	3.50 doz.

Johnson's Condition Powders (Concentrated)

1 lb. Packages	3.60 per doz.

Johnson's Camp and Household Remedies, such as Cough Syrup, Healing Ointment, Headache Powders, Big 4 Liniment, Stomach Bitters, Cathartic Pills, etc., etc., have stood the test of twenty-five years and are in use all over Canada, from the Atlantic to the Pacific. Prices are lower than those of all other manufacturers. Letter orders receive prompt attention.

A. H. Johnson, Wholesale Druggist, **Collingwood, Ont.**

LINK-BELT
SAW MILL CHAINS

Superior in Design, Workmanship, Quality
High Carbon Steel Pins.
Patterns Full Weight—Full Strength

We are prepared to make prompt shipments of standard sizes from our own factory and warehouse in Toronto. Let us figure on your requirements.

This Trademark >——————< *on every link.*

Write for Catalog No. 110D.

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1189 King Street West, Toronto

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Portland, Ore., Link-Belt & Dodge Products Co., 14th and Lovejoy Sts.
A. R. Williams Machinery Company, Limited, Vancouver, B. C.
Waterous Engine Works Company, Limited, Brantford, Ont.

CURRENT LUMBER PRICES—Continued

No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00

Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00
All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1⅝-in. spruce laths	4 10	4 20
1½-in. spruce laths	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 20	3 30
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear		3 28

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Manufacturers of Lumber Tools

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Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

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AMERICAN
ARCADE
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We can equip your van complete.

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FOR LUMBERMEN

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Gutta Percha & Rubber, Limited

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Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia; in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa, Deputy Minister.
December 20th, 1912.

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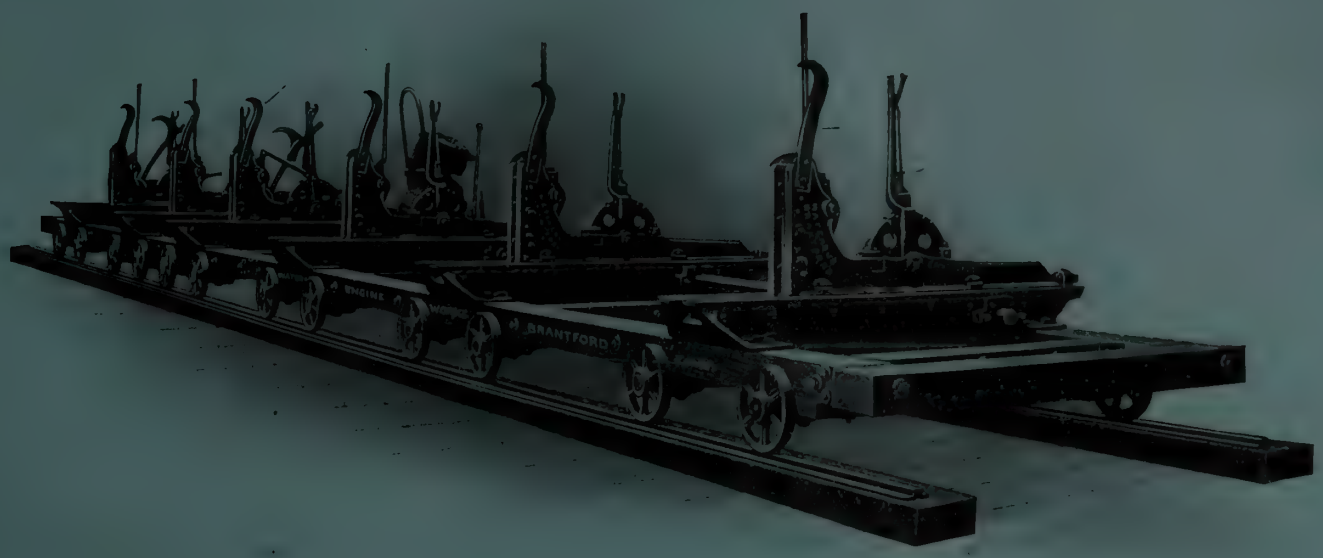

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Write for prices.

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Vol. 35 Toronto, October 15, 1915 No. 20

Canada Lumberman & Wood Worker

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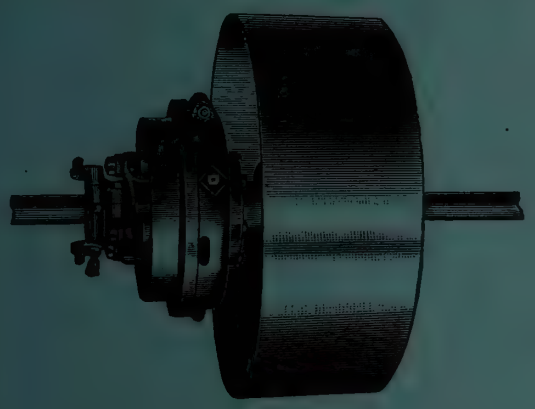

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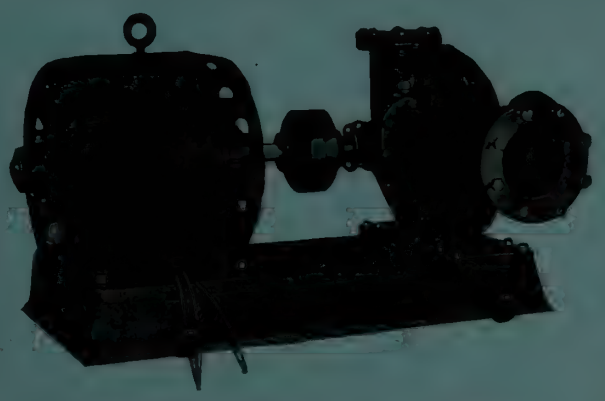

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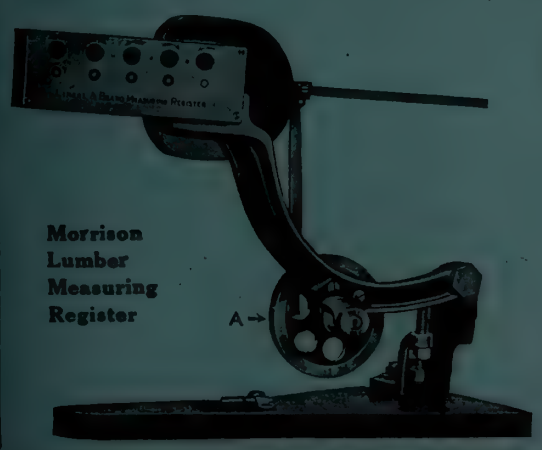

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The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide St., West, TORONTO

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We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

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1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

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2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

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1 Wood Machine for 16-in. wood.

1 Edger for ripping dry lumber, installed.

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1 30 h.p. Generator, 250 volt.

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"CROWN BRAND" is the cheapest sweetener you can buy for your camp—for all cooking, as well as for serving with porridge, biscuits and batter cakes.

In barrels about 700 lbs.
½ " " 350 "
¼ " " 175 "

or smaller packages if you prefer them.

Any wholesaler will supply you.

The Canada Starch Co., Limited

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The most for the money

When you buy mill machinery you want the very best obtainable. It must satisfy you in regard to speed, quality of work and cost of upkeep.

The original "Dunbar" Lath Machine is backed by years of experience, skilled workmen and up-to-date improvements. Every detail of design and construction that makes for the best results in speed and quality of work are present in the Original "Dunbar" Lath Machine.

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Clean Western Oats, in bulk or in strong, well sewn bags; especially suited for Camp Use.

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TWELVE HIGHEST AWARDS.

Strikingly significant on this, our SEVENTY-FIFTH ANNIVERSARY, is the sweeping verdict of the continued supremacy of Quality, Workmanship and Efficiency of DISSTON GOODS.

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa,
December 20th, 1912.

Deputy Minister.

"Brazel Patent" SNOW PLOWS

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Combination Model, Lumberman's Snow Plow, can be used either with or without Rut Cutter.

One man to operate. Adjusting wheels close together make change for light or heavy work in an instant. Wings placed to throw snow 9 ft. wider than sleigh track or narrower if desired. Height of mouldboards prevent snow falling back on track. BRAZEL PLOWS cut 6 in. wider than logging sleighs, roll snow outside track and away from roadway. Cut off knolls, fill up holes and leave a perfectly level road. Cut off dirt and manure heaps from an ice road leaving a clean roadbed. Roll up and push entirely away from the road, 12 inches of loose snow each time the plow passes over.

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300 Symington Ave., Toronto, Can.

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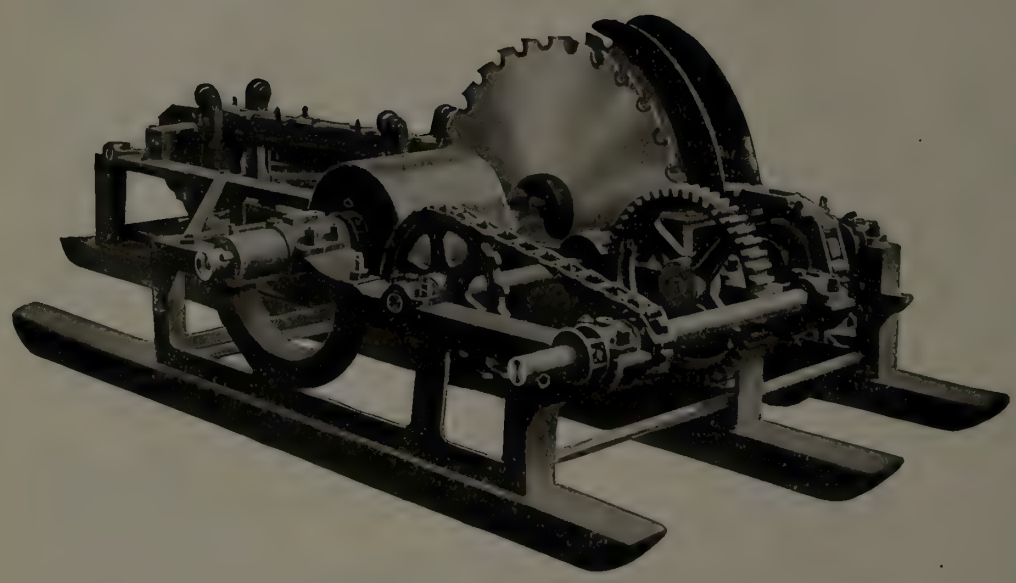
TORONTO, CANADA

Catalogue and prices on application

McLennan's Sleeper Machine



The specifications of this sleeper machine are: capacity, 2,500 in 10 hours floor space, 12 feet x 6 feet; drive pulley 16 inch diameter by 14 inch face; two 38 inch by 8 gauge saws We will be pleased to send you complete information if you are interested.

The McLennan line of saw mill machinery includes gang edgers, shingle machines, lath machines, bolters, sleeper machines and sleeper barkers, etc.

Write us for particulars

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Campbellton, N. B.

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offers the greatest strength in the smallest chain. The overlapped swelled weld gives a factor of safety which cannot be overlooked. Our steel, too, is of the highest quality, and high in tensile strength and elasticity.

For The Man Who Wants Real Chain Service

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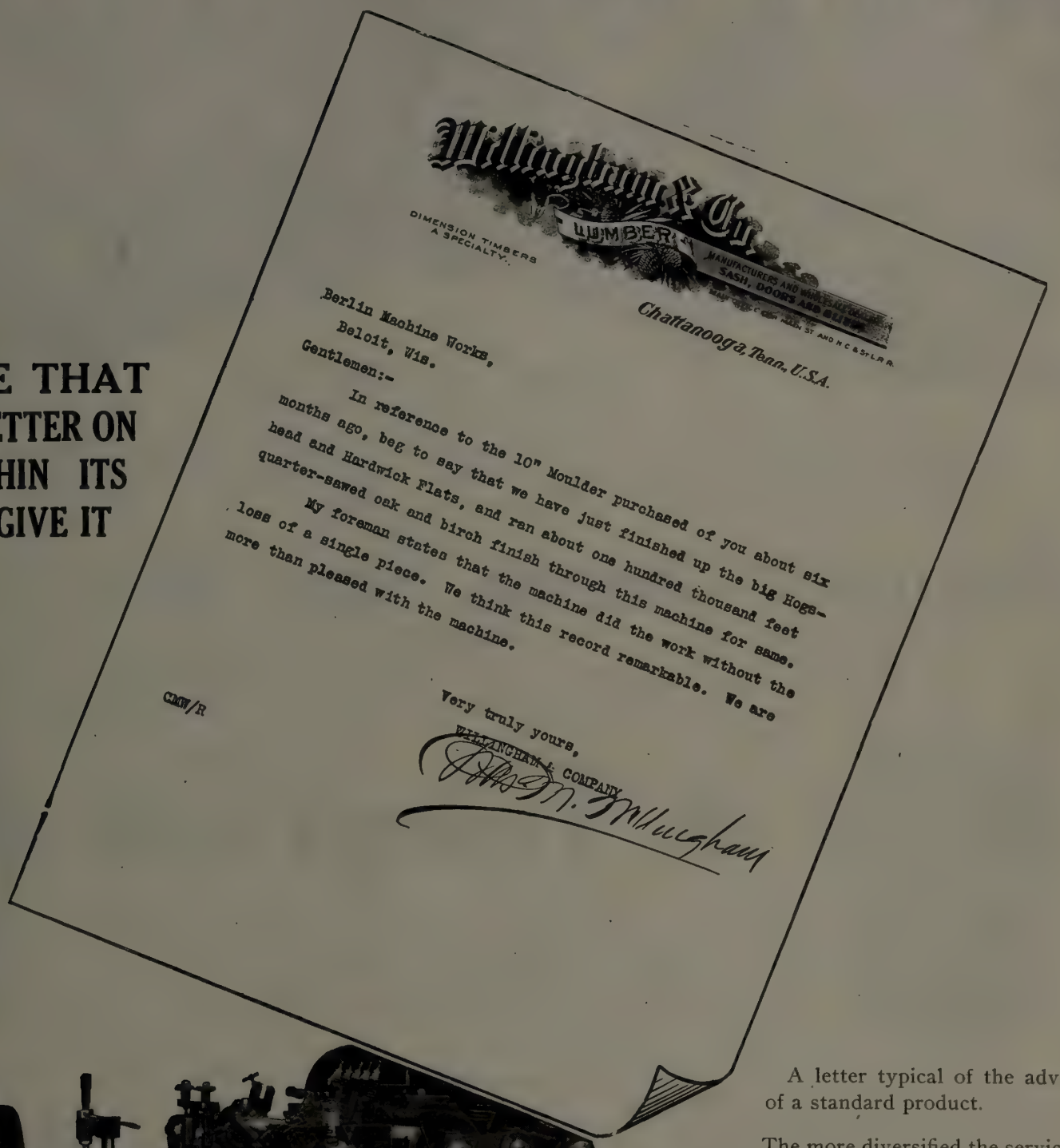

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MANUFACTURERS AND WHOLESALE DEALERS IN SASH, DOORS AND BLINDS
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My foreman states that the machine did the work without the loss of a single piece. We think this record remarkable. We are more than pleased with the machine.

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A letter typical of the advantage of a standard product.

The more diversified the service—the severer and longer the use—the more the user of the Berlin Moulder is convinced of its superiority as an investment

Increased profit realized from better made mouldings as well as from lower producing cost, makes greater economy doubly certain.

Write for information upon the service in which you are interestsd. Ask for No. 108, 109, 111 pamphlets.

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Hamilton, Ont.

U.S. Plant with Offices, Beloit, Wis., U.S.A.

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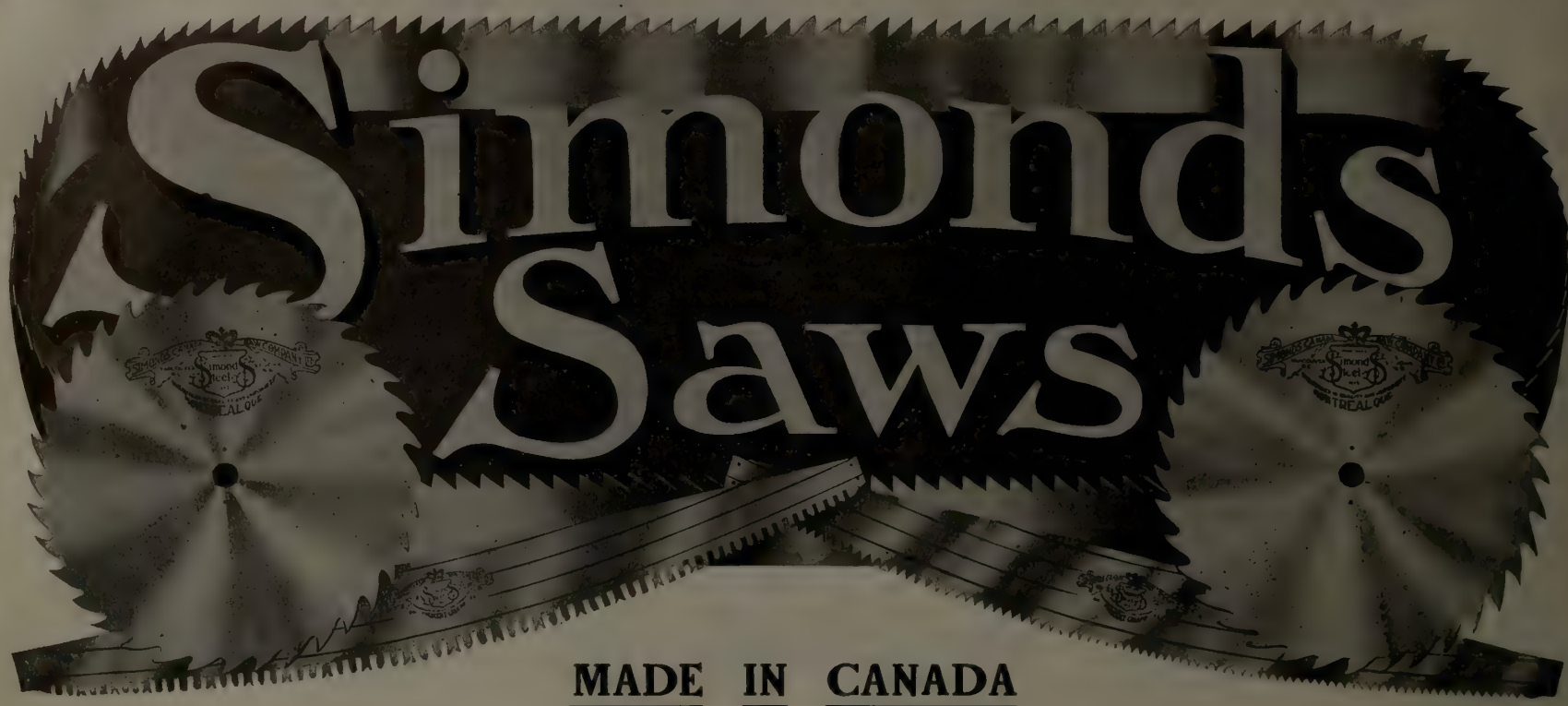

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Tomato Catsup in bulk especially for Lumbermen's requirements.

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MONTREAL — TORONTO — WINNIPEG

Canada Lumberman & Wood Worker

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"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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Healthy State of English Trade

The conditions of trade in Great Britain as indicated by the trade and navigation reports for the month of August, 1915, are analyzed in an interesting manner in a recent issue of the Weekly Bulletin of the Department of Trade and Commerce. The month of August, 1915, contained two working days less than July, 1915, a difference of 8 per cent., yet the imports show only a slight falling off, the totals being £69,496,695 for August, and £75,548,147 for July. The total for August, 1914, was £42,342,707. Exports, on the other hand, exhibit an increase when allowance is made for the difference of two days, the increase being about £300,000. This is an encouraging indication of recovery in the balance of trade. August, 1914, was the month in which war broke out, and it is interesting, therefore, to compare trade conditions at that time with those of a year later. The increases in all branches of the returns are remarkable, amounting to 64.1 per cent. in imports, 33.9 per cent. in exports, and 59 per cent. in re-exports. These results, however, may be misleading, unless contrasted with the figures for August, 1913. The reports for the three years are as follows:—

Trade	August, 1913 £	August, 1914 £	August, 1915 £
Imports	55,975,794	42,342,707	69,496,695
Exports	44,110,729	24,211,271	32,438,855
Re-exports	8,150,499	4,419,833	7,323,749
Total	108,237,022	70,973,811	109,259,299

Immediately following the outbreak of the war trade passed through a period of paralysis which occasioned a falling off of £13,633,087 in imports, £19,899,458 in exports, and £3,730,666 in re-exports, from the figures of August, 1913. The crisis was happily of short duration, and by September a recovery took place, which has since grown steadily almost without interruption. For the first eight months of the year, ending August, the total foreign trade was £892,575,856, an increase of 2.2 per cent. as compared with the corresponding period in 1914. An analysis of these totals shows that the imports increased 20.1 per cent., while the exports decreased 22.6 per cent. and re-exports decreased 4.8 per cent. The figures relating to imports of wood during August are interesting. In August, 1915, they totalled 888,592 loads, valued at £3,801,315. This was an increase as compared with August, 1914, of 30.6 per cent. in quantity and 105.1 per cent. in value.

Among the imports from Canada for August, 1915, and the eight months ended August, the following are included:—

Articles	August, 1915 Loads	£	Eight months ended August, 1915 Loads	£
Wood (hewn other than pit wood)	7,884	68,069	19,241	135,352
Wood (sawn or split fir)	186,043	869,790	584,427	2,596,630
Wood (sawn or split, planed or dressed)	15,701	84,383	28,534	145,392
Hides	8,173	54,059	37,424	261,127

The War Loan—Its Great Importance

The conclusion of negotiations for the loan of $500,000,000 by the United States to Great Britain and France is an event of great importance, not only to the Allies themselves, but to the people of the United States and of Canada. The loan totals $500,000,000; the rate of interest is five per cent.; the period of the issue is five years, after which the money is payable in cash or convertable into 4½ per cent. bonds of the British and French Governments to run from 20 to 25 years from conversion. The security is a joint and several guarantee of the British and French Governments as regards both capital and interest, to take precedence over all other loans. The syndicate of banks floating the loan are to get it at 96, giving them $10,000,000 for their expenses and profits. The yield to investors will be 5.1 per cent. at the purchase price of 98. The proceeds are to be employed exclusively in the United States to maintain the volume of United States exports and to stablize exchange.

This, in a nutshell, is the result of the negotiations. The benefits of the loan will be widespread. It will permit the people of the United States to go ahead with their industrial development without any fear that their enormous export trade with Great Britain will be crippled by a fall in the rate of sterling exchange. The loan means, at the same time, that we in Canada will benefit largely by the prosperity of our neighbors, whereas, if the exchange situation had been allowed to suffer from demoralization, as it did for a few weeks, we would inevitably have suffered a serious financial and industrial setback.

In this connection it is interesting to note a few facts which have been brought to light in the United States recently in regard to its export trade, which depends so largely on the stability of exchange. In spite of the war, and the fluctuations in the rate of exchange, United States exports for the fiscal year ending June 30th, 1915—taking 33 representative commodities—were valued at $1,579,864,000. During the year ending June 30th, 1914, the total was $1,429,133,000. England increased its imports of these 33 commodities from $461,618,000 to $566,069,000. France increased her imports of the same commodities from $128,487,000 to $224,803,000. The 33 items amount to 60 per cent. of the total exports in 1915, and of this the two countries took 50 per cent. as compared with only 40 per cent. last year.

These figures show why the people of the United States realized that the loan was a good thing for them, even if it was a still better thing for Great Britain and France. The Financial Chronicle of New York, after considering some of the above figures asks:—"What would happen if we now denied to Great Britain and France the profit of further trade with us by declining to assist in the marketing of notes or bonds for the rehabilitation of exchange? . . . . The result would be that our entire trade would be in danger of utter demoralization." As a proof of this, the case of the wheat crop is interesting. The United States and Canada have a record surplus of wheat for export this year and it is of great importance that financial means be readily available to facilitate its movement to Europe in order to prevent it from being left on the hands of our own people in America. Under the present nervous condition of the whole financial world it would not take very much to reduce the price of wheat to such an extent that

the great farming interests of the country would be financially embarrassed. By maintaining the rate of exchange through the medium of the United States loan to Great Britain and France, the most effective and natural means for preventing such a disaster have been successfully put into operation. Similar conditions apply in connection with every other industry in the United States which produces materials required in Great Britain and France. The extension of the credit was unquestionably demanded by the welfare of the people of the United States, a fact which has been readily admitted on all sides. The successful arrangement of the loan is something on which everyone in North America as well as in Great Britain and France is to be congratulated.

Proposed Government Ownership of Vessels

At a recent meeting of the Vancouver Board of Trade an interesting address was delivered by Mr. Hugh McLean, a widely-known retired contractor, formerly a seafaring man, who was invited to outline a plan which he had evolved, relating to the situation in British Columbia in connection with the scarcity of tonnage for export shipments of lumber. Readers of the Canada Lumberman are well aware of the interest which this subject has awakened on the Pacific Coast, because it involves very definitely the whole future progress of the lumbering industry of British Columbia. Many suggestions have been put forward and the indications are that efficient remedies for the present shipping difficulties will be worked out in the near future. While we do not feel inclined to back up Mr. McLean's proposals in detail, we believe them to be of sufficient importance to place before our readers as the conclusions of a man who is well acquainted with the situation from a shipping point of view. "I suggest," Mr. McLean says, "that the Government of this province provide the necessary funds, and appoint a non-political honorary commission with a paid chairman, secretary and staff, who will manage the construction and operation of such ships as may be necessary. This commission to be composed of representatives from the large shipping and producing interests throughout the province, making it as representative as possible. At least thirty sailing ships should be built as soon as possible, of such capacity as may be decided upon. To this may be added other ships from time to time as our trade develops.

"Such a commission would not only manage the construction and operation of the ships, but would in every possible way assist in the disposal of our products by establishing agents where necessary to look after our business. Consequently, if properly managed such a commission should be able to increase our trade in a few years to an enormous extent.

"The question might be asked as to why the government should assume the liability in connection with the advancement of the necessary money required. My answer is, that as the government receives large royalties from lumber, coal, minerals and other products, together with ground rents and other taxation, it is therefore more interested than any company or association in the province. It is therefore its duty to take the matter up and do everything possible to develop our trade.

"The commission no doubt would establish a fair and reasonable freight rate to different parts of the world, making the same permanent for a long period, and not to be changed unless sufficient notice were given to the shipping public, in order that they may arrange their contracts accordingly.

"A shipper operating through the commission can guarantee delivery at the port of destination, at a stated price, and in that way will have a great advantage over some of our competitors, who would have to charter private-owned ships, whose freight rates are subject to change without notice, whereby preventing long term contracts being made, in which a delivery price could be stated. On the other hand, if the shipper made such a contract he would be at the mercy of the shipowner, whose only interest is to get all he can, as he has no interest in the development of our natural resources. That would not be the case if the shipper was dealing with the commission, as its whole interest would be in finding a market and delivering our products.

"If we want to get our share of the world's trade we must get into a position where we can guarantee delivery at a stated time, and at a price which is at least no more than our competitors, and that I am satisfied we can do if we own and control our own ships. During the first six months of this year there were shipped from this coast 690,000,000 feet of lumber, of which we only shipped 31,000,000 feet. During the first six months of 1914 there were shipped from this coast 902,000,000 feet of lumber, of which we only shipped 20,000,000 feet.

"The main reason for this state of affairs is that the lumber industry of the States of Washington, Oregon and California own the ships, and are in a position to guarantee delivery at destination, and have selling agencies established that get the business for them. At the present time there are 116 ships loaded with lumber on the way to Australia from the United States part of this coast, and as far as I know there is not one from British Columbia.

"My suggestion is that the government of this province should absolutely own the ships, so that they can not get into the hands of any individual, trust or combine other than the commission suggested, so that all shippers may be served in a fair and equitable manner, with favors to none. If the ships are built, and controlled by any of the large manufacturing concerns in this province, and aided by the government, the small shipper would have but little consideration paid to him, as the said company naturally would look after their own business first, and therefore can not be depended upon to look after the interests of its competitors; besides it would be a very dangerous thing to do, if we want to develop the province and increase our trade, because it would be placing a serious handicap on the small shipper, as he would be always at the mercy of the large shipper who controlled the ships, and I am sure that the hundreds of small shippers in this province would not be satisfied with that condition.

"It would not be so bad if aid were given to an independent shipping company, that had no interest other than to carry our products, but I am sure that it could not be controlled to the satisfaction of the shippers, and in a manner by which we would receive the greatest good from it, because its business would be to squeeze the last dollar out of the shipping trade for its own benefit, and would always send its ships where they could get the most freight. In a short time we would find them in other parts of the world carrying freight for other countries at our expense.

"The question may be asked as to what effect these ships would have on the railway interests in this province. My answer to this is, that they would receive an enormous benefit from them, because the more we develop our trade and manufacturing the more freight the railways will get to haul.

"As an illustration I may say that at the present time the railways are hauling lumber for a distance of something over 100 miles to Tacoma, Wash., where it is loaded on vessels for foreign shipment. This lumber is shipped by the small lumber concerns along the railway, and what is being done there can be done here. All the products which may be shipped from any point inland will be hauled by the railways to our ports for shipment; consequently the more trade we develop the more will be required to develop our resources to meet the demand. Therefore, as our business increases, the business of the railways will increase at the same time, and in fact every other interest doing business in this province.

"The whole question then comes down to the point as to whether we need the ships, and if so, how are we going to get them? Do we want government owned ships, constructed and operated under a commission, or do we want privately owned ships, aided by the government?"

The address was referred to a special committee representing the lumber, grain, banking and shipping interests, with instructions to report back to the board.

Europe's Requirements After the War

When one speaks of the rebuilding of the war-devastated areas in Europe, and all that they will require from the more fortunate countries of North America, one's ideas as yet are very hazy. It is difficult to-day to picture definitely what will be wanted, or when the demand will commence. That the era of reconstruction will be a time of great importance to Canada and the United States is beyond question. It is the part of wisdom for us to do everything possible in advance to put ourselves in a position to do the most good when the time comes, and incidentally to reap the greatest possible harvest by the furnishing of the multitude of materials that will be required.

Among the greatest needs that Europe will have at the end of the present war will be men, money, feed, agricultural stock, and manufacturing machinery. The writer of a letter from Paris to The Journal of Commerce declares that Europe's difficulties in these matters will not be less than those which the Southern States encountered after the Civil War. Although destruction is not yet at an end, a few general ideas on the subject can, he thinks, already be set forth with some safety. That Europe will have to seek for help in America, and for a considerable amount of it, he sees no reason to doubt. England, in these calculations, he believes can be left aside—at least for the present, since "she has not yet given the full measure of her energy, even in money," and thus far industry and commerce have not been interrupted as they have been in France, Germany, Russia, and elsewhere. Following are interesting points in his letter:

"The belligerent nations will have two money-problems to solve when the war is over. The first is to render available the money which their people still have in hand. The second is to obtain credit, either for money in quarters where money can be had or for needed supplies.

"The help of a war indemnity on either side seems hardly practical. If Germany is completely beaten, there is no likelihood of her being able to pay an indemnity for years to come, and then only after her reconstruction is accomplished. If she obtains what she calls an 'honorable peace'—and this is the utmost she can hope—she will surely not include an indemnity from those whose territory she has destroyed and pillaged.

"Moreover—and this has not been sufficiently noted, nor can it be estimated now—there must be industrial stocks in hand from before the war. War prevented their exportation, but they will be thrown on the international market the moment peace is proclaimed. Swiss business men are already in receipt of letters from their German correspondents who foresee such an eventuality and are losing no time. This, for one thing, should do away with the English and American speculation on German competition leaving them a free field even after the war.

"For France and Italy, the money problem needs no more consideration now than if did in 1871; and Belgium does not call for immediate consideration, since her restoration is a matter of international concern even among neutrals.

"In sum, while the words 'universal bankruptcy' have been pronounced, it will not be surprising if this is limited to a forced paper-money regime on the part of Germany, to relative repudiation on the part of Austria-Hungary (that is, of their debts of the union), and repudiation as thorough as the nations will allow on the part of Turkey. The labor question hardly concerns America, except that the tide of Italian and Balkan labor will be turned toward France and Germany or kept at home. France is already drawing on her North-African reservoirs to good advantage—and there are others.

"Large parts of France, like all Belgium, have been made a waste. There has been talk of importing 20,000 houses from the United States. Well, Lille alone in one quarter has had 800 houses destroyed and 1,200 in another. Lille, Roubaix, and Tourcoing constituted together one of the greatest manufacturing centres of the world. The machinery of the factories has been carted away to Germany; and it is the same for myriad smaller centres of France's invaded territory and all over Belgium. Even the woolen stocks in the Roubaix cloth factories have been taken to the amount of millions of dollars. One of my friends had just put American spindles into his cotton mills in the North. The buildings have not been destroyed—not yet—but a refugee informs him that all the machinery has vanished.

"Re-stocking for agriculture means something more. France, for example, has drained her cattle supply to the extreme limits of prudence. Measures have already been taken to restrain the sale of calves and lambs that may serve for reproduction. To prevent a further dimunition of the reserves of beef cattle, refrigerated meat—after one whole year of war—is for the first time offered to the French consumer from abroad.

"The wonderful results obtained with wheat in France by intensive agriculture have long been known. This war has shown that there were similar results in cattle breeding. Whether the United States will be able to help replenish French cattle herds, or whether France will prefer buying meat for some years while waiting for native reproduction, are questions which cannot be answered yet. Here, too, the unknown factor of French colonies will count. Madagascar is already in the field; and Morocco, under French pacification and encouragement, gives signs of becoming a formidable competitor in both grain and meat."

"In machinery there is sure to be an immediate demand for all that comes under the head of machine tools. Agricultural implements will be needed; but here American industry is on the spot, although it has suffered with the rest. The sugar industries of the invaded North will need new supplies. I have spoken of the not yet calculable losses of machinery in textile industries, and, in fact, in all others, in the most manufacturing part of France. And in Belgium, once again, the worst has to be counted with—that is, the utmost ravage and destruction.

"In sum, the United States, in the years immediately following the war, will have an opportunity of selling all that may help to full restoration of agriculture and industry in France and Belgium. This, for the most part, will lead to no permanent trade, except that the multiplication of satisfactory business relations is always a permanent good."

Much that is pointed out in this letter will apply to Canada, as well as to the United States, and all of it goes to emphasize the necessity for Canadians, especially those in the lumber and wood products industries, preparing themselves fully in advance for the demand that is certain to develop.

Editorial Short Lengths for Busy Readers

Mr. Frank Pauze, chairman of the Montreal Chamber of Commerce, is one of the party of Montreal Harbor Commissioners now on a visit to the Pacific Coast to inspect the ports of British Columbia. In an interview at Vancouver, Mr. Pauze recently said:—"I think that the Canadian railways should establish a much lower rate for lumber shipments from this coast to the east during the present shortage of tonnage and I believe it would benefit the railway companies as well as give a fillip to the lumber trade on this coast and supply the demand for lumber, which is very considerable in the east at present." If this were done, he believed the result would be a great stimulus to trade between the east and the west and that the lumber situation in British Columbia would be very much improved. There was no question, he said, about the demand for British Columbia lumber which exists in the east.

Gordon, Grant & Company, Limited, Port of Spain, Trinidad, report under recent date that a good demand still continues in that market for white pine and Nova Scotia spruce boards.

Thursday, October 7th, was the 90th anniversary of the Great Miramichi fire, probably the greatest calamity that ever occurred in the province of New Brunswick.

Canada's Remarkable Financial Position

Hon. W. T. White, Minister of Finance, Foretells a Canadian War Loan—Balance of Trade in Our Favor—Ready Cash Plentiful

One of the most important public addresses that have been delivered by public men in Canada since the outbreak of the war was that of Hon. W. T. White, Canadian Minister of Finance, in an address delivered before the Board of Trade of Toronto on October 7th. Realizing that he was addressing a representative body of Canadian financial, commercial and industrial men, Hon. Mr. White confined his remarks definitely to Canada's financial and industrial situation. Preceding the outbreak of the war, he said, Canada had been a borrowing community. During the six months immediately preceding the war we had borrowed in international money markets over $200,000,000; or more than $1,000,000 a day. For two years previous to the war—we realized this now—the war had been casting its shadow upon our affairs. Its effect had been felt in international money markets as long ago as 1913. From that date interest rates had stiffened, and, at the same time, in the international money markets, a great many short term obligations were outstanding. Canadian borrowings were being used in the construction of works and in building operations throughout the country. They represented the proceeds of loans, secured by Dominion, Provincial and Municipal Governments, railways and other corporations, and their proceeds for the most part found their way into fixed capital. In Canada at that time we had a very heavy so-called adverse balance of trade. This meant that Canada was importing more than she was exporting. One naturally asked how we were paying this adverse balance. We paid it by borrowing more money. So, there was not only an adverse balance of trade to be considered, but there was also the interest on some $140,000,000 which Canada owed to the other nations of the world, representing the interest upon money borrowed in the past. Canada had to provide not only for the balance, but for the interest payments. Our borrowings abroad, in London, and in the United States, approximated roughly the sum total of our adverse balance of trade and our interest obligations.

At the outbreak of the war some very serious problems confronted Canada. In the first place there was the question of panic which usually succeeds the declaration of war. In the second place there was the question of the conserving of our gold reserves. In the third place there was the dislocation of trade. In the fourth place there was the question arising out of the maturing of short date obligations in the London market. In the fifth place there was the paramount question of Canada coming manfully forward and doing her full share in the great struggle, of supplying men and raising money for prosecuting the war until it should be brought to a successful issue. That last problem was the greatest consideration of all. War was the first business in this country. All these problems were very serious ones for a government and for a people, and he proposed to tell how they had been met.

Problems Produced By the War

The first question, that of panic, necessitated immediate action. Measures were taken at once to encourage confidence. There had not been a sign of panic in Canada since that time. The credit of the people of Canada as a nation was involved in connection with the short date maturities in London. Millions of these were maturing last fall when the London stock exchange and the bourses of the world were closed and the British Government was taking the market to itself. The banks of Canada, with the assistance of the Government, took care of all these maturing obligations in London, and Canada's credit came through unscathed.

Then there was the question of our gold reserves. The Government passed an order prohibiting payment in gold in Canada. That was effectual so far as the local situation was concerned. It would not have been effectual in the international situation. We could pay in domestic currency in Canada, but international obligations must be settled in gold or the equivalent of gold in exchange. Canada's imports were then much greater than her exports and we had an indebtedness to meet of about $140,000,000 a year. The result would have been, if certain things had not happened, that Canada would have been stripped of her gold. In 1913 Canada's excess of imports over exports was $300,000,000. In 1914 it had been reduced to $180,000,000. In 1915 it had been reduced to $33,000,000. Many factors had entered into this situation. In the first place the people of Canada began to economize immediately after the war. When people begin to economize they use less and consequently have more to sell. Then the "Made in Canada" movement was started. That movement meant that the people desired to make for themselves those things which they had formerly brought from abroad. The result of the action of the people in economizing and manufacturing those things for themselves which they could manufacture, and above all in increasing their production, was that, instead of an adverse balance of trade against Canada to-day, in one brief year we had entirely reversed our position; so that, for the five months ending August 31st, 1915, we had a favorable balance of trade to the extent of $36,000,000.

Another factor that had a great influence in the situation was the expenditure on the part of the Government for raising, equipping and maintaining our troops in Canada before they were sent forward; also the orders given by the British and Allied Governments for materials, for equipment, and for shells and munitions of war.

The next question before the Government had been that of the gold reserves. The Government passed an order prohibiting payment in gold. By reason of the change in the trade balance it had not been necessary for gold to flow out of Canada for the payment of international obligations, and the result was that Canada's gold reserves had been maintained from the very outbreak of the war until the present day. The Canadian dollar had never depreciated in value. It was worth 100 cents in gold to-day. Internationally speaking, notwithstanding the war, this country had grown richer. If the war continued, and we kept increasing our production by one, two or three hundred million dollars a year, and increased our favorable balance of trade by hundreds of millions of dollars it would be obvious to all of us that we must grow richer notwithstanding the war. In a war such as this not only would men and munitions count, but money as well. If the people of Canada would increase their production and exercise, not parsimony, but reasonable thrift and economy, this country would easily be able to sustain the burden of the war, and to do its full and manful share, and even much more, in carrying it on. Canada's strength lay in her vast natural resources, and it seemed to him that, with our soldier boys going to the front and offering their lives, it was the duty of those who remained at home to increase to the utmost their exertions to produce, and to save, in order that they might contribute to the national strength, and thus help to bear the burden of the war.

How Dislocation of Trade Was Handled

At the outbreak of the war we had been confronted with the question of a serious dislocation of business. There had been a period of severe dislocation. It became necessary to do all that could be done to promote trade and to minimize unemployment. From all parts of Canada the Government naturally received requests which it was difficult to deny, for the carrying on of a very large programme of works and undertakings, with the idea of furnishing employment. When the war broke out it would have been disastrous for the Dominion Government to close down public works and add to the unemployment. Many employers of labor kept their factories going, at a loss in some cases, so as to furnish employment for their men. But that situation had been gradually changing for the better. The economic outlook for Canada to-day, in his opinion, was excellent. Our large expenditures in Canada for war; the large expenditures of Great Britain and the Allies for supplies; the large orders for shells and munitions of war; the greatest crop by far in the history of Canada; all these had materially modified and changed our situation. The credit of the Dominion of Canada was vital for the present and for the future. It must be preserved at all hazards. Therefore, he thought that the true policy for to-day was, that since these other expenditures had taken the place of the large Government expenditures on public undertakings, the Government during the period of the war must have regard to its credit and must go on only with necessary work. After the war had come to an end there would be a period—a brief period, he believed, in the case of Canada—of dislocation and readjustment. He believed it would be brief in Canada because our natural resources were so great and because we would continue to increase our production.

The slogan for all time in Canada was to produce as much as this wonderful land could be made to produce with the men and the capital that we had. After the war, he believed the policy of the Government should be to press forward with useful public works, having preserved its credit in the best possible condition for accomplishing that end.

Hon. Mr. White then devoted his attention to the Government's financing of the war. War was the first business of the Government to-day. There could be no question as to prudent financing in connection with carrying on the war. Our expenditures should be measured by our efforts and our efforts should be the greatest of which the Dominion of Canada was capable. When he had spoken of the necessity for limiting our expenditures, he had referred only to civil

expenditures, not to war expenditures. In view of the necessity for great war expenditures the Government had been confronted with the problem of preventing gold exports. They had accomplished this by borrowing abroad. If the Dominion had borrowed in Canada the money for war expenditure, the result would have been the export of Canadian gold. Therefore the policy adopted had been to borrow money outside of Canada. This redressed the adverse balance of trade and avoided gold exports. Arrangements were made with the British Treasury under which it loaned money to Canada—at the same rate as it borrowed on its own account—money for the expenditure that Canada would require for carrying on the war. These borrowings and our borrowings in New York had prevented gold exports from Canada.

During the past five months Canada had secured a favorable balance of trade of $36,000,000. Suppose this continued, what would be the result? We would have money to invest. In other words, the time was now come when Canada would be able to finance her own war expenditures.

A Canadian War Loan

"After this crop movement is over," Hon. Mr. White said, "We shall consider the question of a domestic, national, patriotic war loan in Canada; money to be spent in Canada for the equipment and the maintaining of Canada's troops, which we shall continue to send forward in ever increasing numbers. Statements in the press, that a loan of $150,000,000 will be put on, have no foundation in truth. There will be no necessity for putting on a loan of $150,000,000 at any one time. Whatever will be done will be done at the right time, having regard to the conditions prevailing in Canada, and for such moderate amounts as the situation may warrant. At the present time I am happy to say that at no time during my term of office, or, I believe, during Canada's history, has Canada's ready cash situation been better than it is at this moment."

After the strain of the crop movement, Hon. Mr. White believed, the people of Canada would respond to an invitation to subscribe patriotically towards a domestic Canadian war loan and they would be given the opportunity on terms that would be equitable and fair to every one in Canada.

"I am of the opinion," continued Hon. Mr. White, "that Canada, at no time in her history, was so well equipped for the movement of a great crop as she is in this the first year of the war."

Hon. Mr. White then dealt briefly with his views in regard to the impossibility of Germany defeating such a combination as that presented by the strength, riches, and resources of the Allies.

Hon. Mr. White's address was received with close attention throughout and was frequently greeted with applause, particularly his references to Canada's improved financial position and to the impending Canadian war loan.

How To Finish British Columbia Wood

A booklet entitled "How to Finish British Columbia Wood," has been issued by the Forest Branch of the Department of Lands of British Columbia. The pamphlet places before architects, builders, wood-finishers, and home-makers the possibilities of the various native woods of British Columbia, when used as interior finish. Instructions for the surfacing, staining, varnishing and painting of such woods as western hemlock, Douglas fir, red cedar, spruce, mountain pine, and tamarack are given, and attractive illustrations show some typical interiors, in office, home, and public building construction. The information given in this booklet is of value to home-builders and others interested in woodworking, and advantage should be taken of the opportunity to obtain a copy. The booklet will be mailed free of charge upon application to the Forest Branch, Victoria, B.C.

Laurentide's Reforestation Policy Successful

The success of the reforestation policy of the Laurentide Company, Limited, of Grand'Mere, Que., is touched on in a report issued by the Conservation Commission recently. "To a considerable extent the lands planted were previously cleared for cultivation, but found upon trial to be unsuitable for agricultural purposes," says the report. "About 400 acres have already been planted to trees, mostly Norway spruce, with some Scotch white and red pine. The oldest of these plantations was made in 1913, and all have been successful. The only failure has been in fall planted red pine. The Scotch pine has made good growth, and the white pine has started well. With the Norway spruce there has been less than 5 per cent. loss, and they have begun to grow nicely. These plantations are guarded by fire lines and roads, and a special ranger is kept on duty continuously from snow to snow. The nursery has been enlarged to produce 1,000,000 trees per annum, and this will mean the planting of practically a square mile per year. It is expected that by the time the trees reach suitable size to be thinned for pulpwood the company will have a reserve of cheap wood within six miles of the mill. If this project is carried out it will be the first of its kind on the continent."

From the Reader's Point of View

Consignment Shipments Involve Great Loss

Editor Canada Lumberman: Liverpool, Eng.

Criticism of a non-complimentary character may not be appreciated by some of your readers, but where the cap fits, a little tonic will do no harm. Some of your Canadian shippers, especially of yellow pine lumber from Montreal, have shown a strange want of foresight, or perhaps to be more correct, a great error of judgment by shipping to this country on consignment (i.e., not sold on contract) large quantities of pine lumber that, even in normal times, are very unsaleable, but at the present time cannot be sold at all, or at any rate not within many, many pounds per Petrograd standard of what the shippers require, to get their own money back; and where the error of judgment comes in, is that these goods are landed in this country on a top, panicky war freight of 145 shillings per standard. Add to this cost of marine and war risk insurance, say 10s. per standard, and on many shipments to Manchester, there are canal tolls of about 10s. per standard. Then on being landed on the quay quite unsaleable, these goods must go into store at a cost of another 10s. per standard, these amounts (all payable in cash, which, of course, has to bear interest of 5 per cent. from date of arrival) total about £9 per standard. In six months' time, loss of interest, yard rent, and fire insurance, the cost of sheeting will amount up to fully another £1 per standard, so that, even if there should be a market in six months, the shipper has standing to the debit of these goods the large sum of £10 per standard for the privilege of transferring his goods from his stock in Canada to the storing ground in Manchester.

I must not forget to add on to this list of charges, an amount that a wise man would have thought of before committing himself to the making use of this high priced freight room by sending forward goods that there is no demand for, viz.; the loss he has to face in exchange, i.e., the pound sterling being only worth $4.55, here is a clean loss of about 1 shilling in the sovereign, and on goods valued at £20 per standard f.o.b. Montreal, represents £1 per standard to be added on to that already heavy total of charges. This is presuming that the shipper takes his sterling draft on his London agents or bankers, on which he can only realize about $4.55 to the pound sterling.

My criticism in short is: Why charter the freight room at all at the exorbitant rate of 145 shillings, if it is not wanted to lift goods that are sold on contract, and must be delivered, or, the freight room being chartered, why not utilize it by shipping some class of goods that is wanted and is commanding a good price c.i.f. Manchester, thus avoiding all those local charges, and unnecessary locking up of capital.—Liverpool Correspondent.

* * *

A Good Record for British Columbia Shingles

Editor Canada Lumberman:— Stouffville, Ont., October 5.

I have before me a pamphlet issued by the British Columbia Shingle Agency, with testimonials in regard to the time some British Columbia cedar shingle roofs have been on.

I believe that Ontario dealers could furnish some information which would perhaps equal that of the western dealers.

In the year 1894, the first cars of XX B. C. shingles arrived in Stouffville, having been bought by the late W. T. Hartney, who had a yard here for several years. One roof in particular is of interest. It has stood the test of all kinds of storm and winds for the twenty-one years, and is, so far as one can see, as good as a roof can be. The shingles are lying flat, none of them showing any curve.

We have dozens of roofs around here, which have been on for a period of from ten to fifteen years. We alone have sold about fifty carloads (mostly XXX) B. C. shingles. This totals about 11 or 12 million shingles, and I might also add that we have had very few complaints regarding these shingles. This does not seem so very many cars for one dealer, but when you consider that our village has only about 1,100 of a population, and we have to go to the farmer trade, it makes it look somewhat better.

Business around here has been better than last year, until now, but there is not much new work in sight just now. However, you cannot tell what may develop, as our farmers have had a very backward harvest. We have had nothing to complain about, even if the fall trade should drop off, as we have had our share of the other trade during the present season.—D. M. Heise.

The National Elevator Company, Limited, head office at Winnipeg, Man., known to the lumber trade for a number of years as shippers of a high grade of feed oats, had the misfortune to lose its elevator and sacking plant through a fire this summer. As this company owns a long line of elevators in the best oat growing sections of Saskatchewan and Alberta, and is bagging the oats with a special view to the rough handling incident to camp use, old friends of this firm, as well as prospective new customers, will be interested to learn that its new plant, conveniently located at Port Arthur, Ont., is now completed and was put in operation on October 1st.

Lieut. C. P. Waldie Wounded

Lieut. C. P. Waldie

Lieut. C. P. Waldie, of the 8th West Surrey Regiment, formerly of Toronto, was wounded on September 27th. News to this effect was received by his family in Toronto, on October 6th, in the following cablegram from the War Office:—"Regret to inform you Lieut. C. P. Waldie, 8th West Surrey Regiment, was wounded September 27. Further news by wire when received. Secretary War Office." No further word as to Lieut. Waldie's injuries has yet been received, although the family have cabled to several friends in England. They are expecting definite information daily. Lieut. Waldie's family received letters from him the day before they received the wire regarding his being wounded. These letters were written from the front, somewhere in France, and stated that he was, at that time, in good health.

Lieut. C. P. Waldie is well known to lumbermen in Ontario as manager of the Victoria Harbor Lumber Company, Victoria Harbor, Ont. Soon after the war commenced he felt the call to go to the front. He left Canada in September and proceeded to England, where he took the officer's training course in the Inns of Court. Soon after qualifying he accepted a commission with the Queens Royal West Surrey Regiment, and for some time was stationed at Worthing, England. Lieut. Waldie is a son of the late John Waldie, in his day one of the most successful and widely-known lumbermen in Ontario, to whose efforts were due the successful up-building of the great lumber manufacturing industry at Victoria Harbor. Lieut. Waldie has a great many friends among the lumbermen of Ontario, who will anxiously wait for details regarding his condition, and will hope that his wounds are not of a serious nature.

Box Shooks Exports on the Eve of Expansion

One of the largest and most important box shook and lumber operators in Great Britain, is at present touring through Canada, and was recently interviewed by the Canada Lumberman. For business and personal reasons he objects to his name being made public. He assured the Canada Lumberman, however, that he was already convinced, from the results of his trip in Eastern Canada, that in the very near future the volume of trade in box shooks between Canada and Great Britain would be increased enormously. Previous to the war, Great Britain secured her material for this purpose very largely from Europe. Conditions which have developed during the past year have directed the attention of English box shook importers to the magnitude of the possible production of shooks in Canada, and this importer, one of the largest in the world, is now most enthusiastic in regard to the trade with Canada. He assures us that he is absolutely certain that the great majority of the supply of shooks in future will be secured from Canada. He finds not only the quantity, but the quality, shipping conditions and everything else in favor of the Canadian trade. He has already placed very substantial orders in Canada and is going through Canada to the Pacific coast. He will, upon his return, be posted very thoroughly in regard to the whole subject and is looking forward with great interest to the transferring of this trade from European countries to Canada.

Running Down Fire Fiends

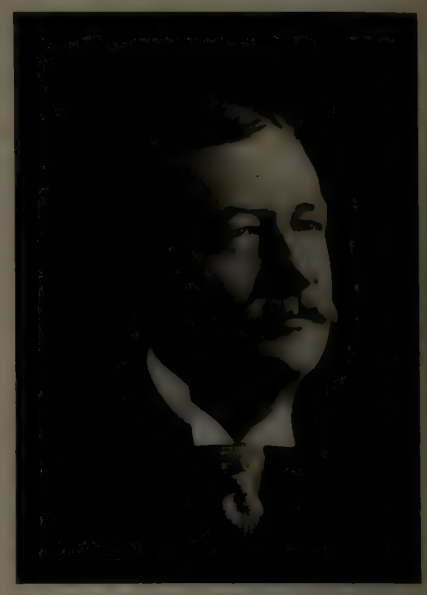
About four months ago the Canadian Forestry Association inaugurated a Publicity Bureau, the object of which is to distribute information on forest affairs and to carry on a propaganda for improvement in forest protection and other concerns of a like order, making use of newspapers and magazines throughout Canada for this purpose. The Association has met with general co-operation from the press and has already been able to effect much good. In this connection, one of the plans adopted has been to co-operate with the Lower Ottawa and the St. Maurice Forest Protective Associations in publishing news items throughout Quebec, regarding the prosecution of settlers for causing forest fires. Formerly, these prosecutions had only a local effect. Now, however, by publishing in French and English newspapers, the names, addresses, and fines in each case, settlers in all parts of Quebec province have been made acquainted with the efforts of the Protective Association, and the penalties imposed by the courts. The Canadian Forestry Association report that this plan is working out systematically and is resulting in a much more practical appreciation of the dangers confronting the incendiarist.

Mr. Joseph Oliver Now a Colonel

As a recognition of the important part played by the Canadian National Exhibition in recruiting this year, Mr. Joseph Oliver, the president, has been appointed Honorary Colonel of the Canadian militia. Official word of the appointment was received by Dr. Orr recently.

On the occasion of Sir Sam Hughes' visit to the Exhibition on Labor Day, when he reviewed the troops of the Model Camp and the men from Niagara, who had taken part in the parade, he expressed his intention of giving recognition to the Exhibition in some way, and before he left decided upon honoring President Oliver in the way mentioned.

Mr. Oliver is at present on a visit to the Pacific Coast, and has not yet been notified of his appointment.



Col. Joseph Oliver

Although not a native of Toronto, Col. Oliver came to this city at the early age of three years, which was in 1855, and so may be considered in every sense a Torontonian. "Citizen Joe Oliver" he has been called on occasion, and as he has held office as Mayor of Toronto, in addition to serving as school trustee and Controller at various times, and is now president of the Exhibition Board, the name is a fitting one.

While he has attained high office and extensive popularity, having in his last Mayoralty campaign polled a majority of 7,252 votes over his opponent, and having failed to enter Parliament by the comparatively narrow margin of 700, it is still characteristic of him that he takes nothing too seriously—not even himself.

In the popular usage of the term, Col. Oliver is a "self-made man." A carpenter by trade, he forced his way upward until he became a lumberman, and president of the Oliver Lumber Company. He is a Mason, an Orangeman, an Oddfellow, and a pronounced temperance advocate.

Italy Would Take Canadian Lumber

Former Supplies Were Drawn from Countries now at war—Varieties and Sizes Required

An Italian firm in Milan furnish information regarding the lumber market in Italy, where there is a fair possibility of developing a demand for Canadian lumber products. The report, which appeared in the Weekly Bulletin of the Department of Trade and Commerce, is as follows:—

Italy produces but small quantities of fir timber (spruce), because, in her territory there are only a few forests, all of which are comparatively small. Before the beginning of the present European war the principal suppliers to Italy of spruce were Austria-Hungary, Roumania, Russia and Germany. At present every importation from these countries is completely suspended.

The annual consumption of fir timber in Italy is estimated to be about one hundred million of francs, and the articles which are in use and which are manufactured from the said timber are boards and planks. Fir beams, of all forms, are relatively in small demand in Italy.

Boards and Planks

The boards and planks mostly used in Italy have the following sizes:—

Thicknesses:—

12 millimetres (resp. 15/32 of an inch).
18 millimetres (resp. 23/32 of an inch).
24 millimetres (resp. 15/16 of an inch).

To a smaller extent there are also used boards of—

29 millimetres (inch 1.5/32).
34 millimetres (inch 1.11/32).
39 millimetres (inch 1.17/32).

To a smaller extent there are also used planks of—

48/51 millimetres (from inch 1.7/8 to 2 inches).
75 millimetres (inches 2.15/16).
80 millimetres (inches 3.5/32).
100 millimetres (inches 3.15/16).

Widths.—In regard to widths, there are two dimensions: One named sottomisure, which contains the boards from 10 centimetres (inches 3 15/16) to 18 centimetres (inches 7 1/16), and one named regular widths, which is formed of boards and planks from 19 to 40 centimetres and up, i.e., from inches 7½ to feet 1-3¾.

Lengths.—The greatest quantity of boards and planks used in

Italy are (about 13 feet) 4 metres in length; on certain conditions, however, the lengths from 3 up to 5-6 metres (from about 10 feet to 20 feet) are also acceptable.

Moreover, there are largely consumed in Italy for packing purposes, boards from 1.50 to 2.75 to 3 metres in length; in width from 10 centimetres (3 15/16 inch) and up, with an average width of at least 16 centimetres (6 5/16 inch); the thickness required in these lengths, viz., from metres 1:50 to 2.75-3, are only 12, 18 and 24 millimetres.

Qualities Required

The quality which is mostly required in Italy for the boards of 12, 18, 24 and 29 millimetres of thickness is the mercantile quality.

For the thicknesses of 34, 39, 48-50, 75-80 and 100 millimetres, there is required a more choice quality than the mercantile one, which might be named first quality.

By the phrase "boards and planks of mercantile quality" are understood boards and planks which are perfectly sound but which may have some knots, provided they are not loose. These knots should be neither too numerous nor too large.

By first quality, boards and planks are understood which are not only perfectly healthy, but which are free from large and numerous knots. In the first quality few and small knots are tolerated.

The boards and planks must have the parallel form, and must be worked square edged.

Since the rupture between Italy and Austria-Hungary and Germany, the prices of fir timber have greatly risen in Italy. If Canadian producers were acquainted with the qualities and assortments of the boards and planks, to which Italian prices would refer, these figures might be useful for Canadian spruce manufacturers.

Generally speaking, however, the Canadian producers have no knowledge of the qualities and assortments of the Austrian-Hungarian, Roumanian, Russian and German boards and planks, and, accordingly, they have no means of judging the practical worth of the prices granted in Italy by the spruce manufacturers of the above mentioned countries. This is especially true as the assortments, qualities and sizes of the Canadian spruce boards and planks are quite different from those already mentioned.

It would doubtless be more practical for Canadian producers accurately to study the question of making boards and planks in the sizes required by the Italian markets, and then quote them according to their usual classifications of quality. In this manner Canadian manufacturers would have only to solve the question of the sizes, for, as regards quality, the Italian consumers would doubtless be fully satisfied with the Canadian variety. Canadian producers are advised, however, that their prices should be quoted c.i.f., particularly Genoa and Naples.

Terms of payment.—Italian consumers are quite ready to pay cash against documents, on the condition, however, that the prices are convenient, and provided that they have at least a clear idea of the timber which they are to receive.

Canadian Telegraph Poles Being Tested in England

According to a recent issue of the Weekly Bulletin of the Department of Trade and Commerce, the Controller of the post office stores, 17-19 Bedford Street, London, England, is making a test of Canadian poles to ascertain whether they are suitable for post office requirements. In a letter to the Canadian Trade Commissioner at London, the Assistant Controller of the post office writes as follows:—"The Forest Branch of the province of British Columbia, has already forwarded a red cedar telegraph pole as a specimen. This sample is under examination and test, but it is yet too soon to say whether this class of timber will be suitable for British post office requirements.

"This department will be happy to consider other Canadian timbers, provided sample poles are forwarded.. It should be pointed out, however, that a single pole is hardly sufficient to enable a comprehensive test to be made, and, should any of your correspondents intend submitting specimens, you will perhaps be so good as to ask them to send not fewer than six poles.

"I should perhaps add that, owing to the reduction in engineering work as a result of the war, the department will not be in the market for poles this autumn."

Quebec's Receipts from Lands and Forests

The annual report of receipts and expenditures for the province of Quebec for the fiscal year ending June 30th, 1915, shows that the largest single item of receipts was for lands and forests, which brought in a contribution of $1,840,347, while the expenditure for the same was $388,816, thus leaving nearly a million and a half to the good. New Brunswick also reports a very prosperous year in the amount of lumber cut off Crown lands. The cut on which stumpage was paid was 285,000,000 superficial feet, as against 270,000,000 in the previous year.

Ontario's New Deputy of Lands and Forests

Albert Grigg, Ontario's New Deputy of Lands and Forests

Mr. Albert Grigg, M.P.P. for Algoma, has been appointed Deputy Minister of Lands and Forests for the Province of Ontario, in succession to the late Mr. Aubrey White, who died suddenly during the past summer. Mr. Grigg will assume his duties on October 18. The announcement, which was made by Hon. Mr. Ferguson, came after the Cabinet Council on October 7th.

Mr. Albert Grigg was born in the County of Huron in May, 1873. He was educated at Bruce Mines, of which place he later became Mayor. He is a pioneer of the Algoma district, having filled many public positions there. For three years he was License Inspector, for one year Reeve of Plummer Township, and for two years the Mayor of Bruce Mines. He was first elected to the Legislature for Algoma at a bye-election in 1908, and subsequently re-elected at the general elections of 1911 and 1914. Mr. Grigg's long experience of the north country, in which much of his life has been spent, will be a valuable asset to him in the important duties of his new office.

Captain R. H. Webb Sends Relic from Ypres

An interesting relic from Ypres, Belgium, has been sent to the Toronto Board of Trade by Capt. R. H. Webb, formerly manager of the Webb Lumber Company, Toronto. The relic consists of some pieces of metal picked up in the ruins of the famous Cloth Hall at Ypres. Capt. Webb, who is a member of the Headquarters Division Train, First Canadian Division, in a letter to the secretary of the Board of Trade, says:—

"I am sending to you tomorrow one of the anchors I picked up from the ruins of the Cloth Hall at Ypres. It is not much, but there is nothing to get, as all has been destroyed of this once noble and beautiful building that was used to exhibit all the wonderful industries of the Belgians from the 14th century until the war started. I think that it is particularly adapted as a relic for our Board of Trade of Toronto, as so many of our Toronto boys lost their lives right under this building, and in sight of it. The late Trumbull Warren was killed right under the walls of this building."

When Capt. Webb left Toronto with his contingent he held the rank of lieutenant, but a few months ago was raised to a captaincy. On July 12th he was decorated with the Military Cross, by His Majesty, the King, at Buckingham Palace. He was the only Canadian so decorated on that occasion, and he had the honor of a short conversation with His Majesty, who asked several questions regarding the Canadians, expressed deep appreciation of their work and mentioned that, of all the cities he visited whilst in Canada, he was very much pleased with Toronto, the people, and its beauty, and was not at all surprised at the wonderful loyalty and recruiting results.

E. Long Portable Mill Catalogues

Two interesting new catalogues have been issued by the E. Long Mfg. Company, Limited, Orillia, Ont. One of these gives illustrations and interesting descriptions of their No. 6 portable sawmill and its equipment. The other describes in a similar manner their No. 5 portable sawmill. The catalogue describing the No. 6 mill is arranged in a very useful manner. The items of the mill are taken up one at a time, commencing with the portable engine and boiler, which is mounted on skids; then the carriage and its parts, the track timbers, the saw frame, the jaw clutch coupling, the feed works, the saw guide, the 32-in. edger supplied with the No. 6 mill, the edger table, the swing saw, the sawdust conveyor, the rolls, the belt tightener, the counter shafting and the outfit of tools. The illustrations and description are arranged in logical sequence so that they give a detailed and consecutive description of the portable mill in such a manner as to show anyone who is not familiar with the working of such a mill, just how it operates. In addition to all this useful information, the catalogue contains a diagram of the floor ready to receive the machines; a diagram of the timber before the flooring is laid; a setting plan for the saw frame and carriage and a detailed plan of the No. 6 right hand sawmill as it appears with the machinery installed. The No. 5 portable sawmill is also illustrated and described in very complete detail in a separate catalogue, which also contains a floor plan of the No. 5 right-hand sawmill as it appears with the machinery installed. These catalogues will be exceptionally useful to those who are interested in such equipment.

British Columbia Red Cedar

By Aird Flavelle

AN ADDRESS DELIVERED BEFORE THE BRITISH COLUMBIA FOREST CLUB AT VANCOUVER

In the following remarks I have not attempted in any way to prepare a technical paper, or one covering anything like the whole subject, but have endeavored to confine myself to some of the interesting information in regard to the cedar timber on the Coast in the district tributary to Vancouver, which has come under our observation since we have been operating here, and if in doing so I have over-emphasized the viewpoint of the siding manufacturer I trust that this may be overlooked.

Mr. Langille, of the J. D. Lacey Company, in a paper on B. C. timber resources has estimated the stand of cedar in the province at 34.4 per cent. out of a total estimated stand of 335 billions, or somewhat over 110 billion ft. Dr. Clark is inclined to put the percentage somewhat lower—at 25 to 30 per cent. out of a stand of 250 to 300 billion ft., or somewhere around 70 to 80 billion ft. Whatever may be the difference of opinion among experts, however, as to exact quantities, on one thing are they all agreed, and that is that British Columbia is pre-eminently the cedar country of America.

Apparently wherever in the province there is an excess rainfall there will you find the cedar, whether it be in the wet belt of the Interior, the deep narrow valleys of the Coast, the West Coast of Vancouver Island, the wet belt north of the Seymour Narrows, or the Queen Charlotte Islands, in swampy flats as well as on the tops of the mountains, wherever there is plenty of moisture there the cedar flourishes. It seldom however occurs in pure stands over any considerable area. In the Southern forests (and by these I mean those on the mainland south of the Seymour, Surge and Euclataw Rapids, just as I shall refer to those north of the rapids as the Northern forests), on the lower slopes of the mountains and most of the low lands, cedar will be found in varying percentages in mixed stands, with Douglas fir predominating. As the altitude increases the percentage of cedar usually increases, while the fir gives place to hemlock and balsam. A cedar—fir or a cedar—hemlock—balsam type is also very characteristic of the high benches and the short high stream valleys along the various inlets, merchantable stands being found at as high an altitude as three to four thousand feet. Practically all the larger stream valleys flowing into the various inlets, while they may have a hemlock-balsam type in the river bottom itself, have a very fine belt of cedar on the steep mountain sides along their course.

In the northern forest, hemlock and balsam largely take the place of fir in mixed stands with cedar, and the cedar is much more frequently the predominating timber in the stand. It also occurs as the predominating species at much lower altitudes and closer to tidewater than in the Southern forests, making the Northern cedar much more accessible than the bulk of the Southern cedar.

Generally speaking, cedar is a tree of very slow growth, and yet possibly, after the spruce, attains the largest diameter of any tree in the province. Trees as much as fifteen feet in diamter are sometimes found. It can, therefore, be imagined to what age a cedar tree will live. Many of the four to six-foot trees in the Northern forests will have twenty to thirty or more rings of growth to the inch, and only the other day I was in a stand of cedar on this Inlet where trees sixteen to twenty inches in diameter must have had fifty or more growth rings per inch; in fact it was so slow a growth that I doubt if the rings could have been counted without the aid of a magnifying glass. On the other hand, I have seen lumber cut from second growth cedar on this peninsula that ran less than three rings to the inch. On the peaty soils of the Northern forests much slower growth is usually found than on the better soils of the Southern forests, and in fact we almost doubted that any of the characteristic fast-growing Southern cedar grew in the Northern forests until the other day, when—mixed in a boom of the regular old growth type from Green Point Rapids—we ran across a number of logs of very rapid growth. One log 42 inches in diameter 16 feet from the butt, was less than 200 years old. It was 24 inches at 100 years. This rapid growing cedar is usually sound, whereas the slower growth cedar is more or less faulty in the heart.

Another characteristic of the Southern cedar is its much straighter grain, or rather, perhaps, its freer splitting qualities. This is what makes the Southern cedar so very suitable for shingle bolts in contrast to the Northern cedar, where the fibres of the wood seem to be more or less interlocked, making it much harder to make a clean job of splitting.

There is no wood in B. C. where high quality makes so much difference in value as cedar, nor is there any tree where quality is so affected by local growth conditions. The highest type of quality we have seen is found on well-drained benches at the foot of Northern slopes in deep warm soils, when the cedar forms a minor stand in a heavy stand of Douglas fir. The heavier crown and longer body of the fir seems necessary to force the growth of the cedar upward, and the absence of light on the trunk kills off the branches early, leaving the later growth on the trunk all clear. In stands of this character the trees will be found clear of limbs all round for sometimes 70 to 80 feet up the trunk. Where cedar is found in pure stands, even in situations otherwise as favourable as above, the limbs are liable to be found further down the trunk owing to the thinner crown of the cedar failing to keep out the light, and even in the clear butt logs the core of rough wood will be found much larger. On steep slopes the downhill side, when it is exposed to the light, is almost always rough, whereas the side next the slope will usually be found clear, often for a hundred feet or more. From these types the quality shades off by

British Columbia's Magnificent Cedars—Independent Lumber Co., Timber Berth 413, Harrison Lake.

varying stages until you come to the scrubby type, "feathered to the toes," of the open swamp country.

Cedar does not grow in as heavy stands as fir, in fact stands of over one hundred thousand feet per acre are extremely rare, the average type of stand in the Northern cedar belt running probably from thirty to forty thousand feet per acre, this including the hemlock and balsam. In the fir-cedar type of the Southern belt, where the cedar predominates and is of a high quality, stands of sixty thousand feet per acre over considerable areas are not uncommon, though the heaviest stands of all are undoubtedly found in the Northern belt. In the Northern forests, particularly, there is a large wood volume that is practically useless as far as merchantable products go, owing to the fact that it is so full of large coarse knots—much of it, particularly the tops of the trees, being just one solid mass of knots.

Cedar sustains less damage through fire or windfall than any other Coast wood except when very hollow. Of course, when fire gets into a hollow butt it simply makes a chimney of it, but in ordinarily sound stands it is perfectly good for twenty years or more after being fire-killed, whether standing or down, except, of course, that the sapwood is gone and there is some loss in scale through checking.

There does not seem to be any worm that attacks the fire-killed cedar, as there is in the East in white pine. Windfall cedar is notorious for its resistance to decay. It is quite common to see windfalls that have been down several hundred years perfectly sound except for the sapwood, and instances have been known of windfalls down 2,000 years still having sound wood in them.

In certain sections there is a powder worm that attacks the cedar. There seems, however, to be no set rule covering its occurrence. I have known it on the North Arm to practically ruin the timber on one slope of a hogback, and not be found at all over the top on the other side. In certain parts of the Gordon Pasha country and Powell Lake it is prevalent, and I have heard of it in Howe Sound, but do not remember running across any of it in logs from the Northern belt, We have found it in both green and dead timber, and sometimes it seemed almost as though it were killing the tree. Usually it is worse in the tops, but often is found in the clear butt logs, having obtained access through the scar of an old burn. It seems to follow the growth rings around the tree, and in green timber causes the wood to turn a dark brown throughout the neighboring rings. The holes are about one-third of an inch long and one-eighth of an inch wide, and filled with powdered wood. It is very difficult to detect it in the log before sawing, except sometimes by the sick appearance of the bark or the brown ring in the freshly cut end of the log. We have never been able to find a specimen at work, so do not know what the worm looks like. In some of the dead timber from the old burn on the north side of the Gordon Pasha Lakes we have found colonies of flying ants that have bored passages in the wood, but the damage from them is not great. I would, however, like to see the powder worm trouble looked into somewhat by the Government entomologist.

Owing to the limited uses for rough cedar and the time it would take to grow clear cedar, little can be done in the way of reforestation, except possibly in growing poles. Unlike fir or spruce, cedar is not a good dimension wood, so that except for poles it cannot find a wide use in small sizes. It is probable, therefore, that we are at the present time harvesting the last crop. What was probably the finest stand of cedar in B. C.—that around the shores of Burrard Inlet—was logged years ago, but outside of that I believe the best of the cedar in the Southern belt, viz., that found on the higher benches and along the deeper valleys, is still to come out. Much of it will require heavy capital outlays and probably the perfecting of the aerial cableway or some other method of logging before it can be handled profitably. The Northern belt has hardly been scratched yet, but the bulk of it can be opened up more cheaply, as it is nearer the salt water and mostly below the fifteen hundred-foot contour line.

Loggers seem very hazy on the score of relative logging costs of fir and cedar. I have had opinions all the way from fifty cents per thousand more to twice as much for cedar as fir. On one thing they are all agreed, and that is, that it costs more to log cedar than fir. This is partly accounted for by the lighter stand per acre, partly by the smaller volume per tree, and largely by the faulty nature of the timber, which necessitates heavy allowance for defect in scaling. Then in the Southern belt much of the cedar grows in rather inaccessible places and on steep hillsides, all making for more costly logging, while in the Northern belt the rough, broken nature of the country, and the frequency of rock outcrops and ledges, necessitate much extra road building, while the distance from headquarters for supplies and repairs causes frequent delays and costly shutdowns. Much of the cedar in the vicinity of Vancouver has been cut in the form of shingle bolts, but, except where this is a cleaning-up process after logging has been finished, it is a very wasteful method of utilizing the standing timber.

The scaling of cedar calls for exceptional skill, experience and judgment. The wood is so faulty and so irregular that much of the time it is simply a case of guess and try to do the fair thing. And, while passing I just wish to put in a good word for the present members of the Vancouver scaling staff. I believe they are all thoroughly honest and trying to do the square thing to the best of their ability in a very difficult position. Of course, they will sometimes make mistakes, like the best of us, but if we only stopped to consider that probably the errors will compensate themselves during the year we might not be so ready to criticize. What we all want is uniformity of scale, and we can then adjust ourselves to it, whether it be high or low. I might add, however, that it is a curious psychological fact that a low scale is more satisfactory to both the logger and the millman than a high scale. The logger feels he is making money because he is getting a higher average price for his logs, and the millman feels he can pay a high price because he will get an over-run that will reduce his log cost, and at the same time he feels that he is putting one "over" on the logger. What we don't want is a scale that is high to-day and low to-morrow. Naturally, some scalers must be better than others, having had more experience and being capable of using better judgment. If these scalers could be reserved largely for cedar I believe it might help the situation, particularly in regard to grades. A man who has not seen much cedar cut in the mills, or has not had a long experience in scaling Pacific Coast timber, is badly handicapped in scaling and grading cedar logs. At the present time I believe the scale on cedar is fairly uniform—probably as uniform as it ever will be—but I believe much is to be desired in the way of uniformity of grading of cedar by the different scalers. I suppose we have appreciated and used more than any other firm here the grading of logs as a basis of purchase, and there are three or four of the regular scalers, at least, who are grading fairly uniformly and whose grading we know, so that we feel reasonably safe in buying logs on their grades. But we have run across several instances of grading by other scalers who evidently had not had the same experience in cedar, and whose grades varied very widely from what we believe was the intended standard. We believe this has occurred somewhat more frequently with the shingle mills, with the result that the whole policy of grading has become discredited in the minds of certain loggers and manufacturers. This is the reason that I suggest, if possible, the reserving of several of the best scalers whose methods are uniform for the scaling of cedar practically exclusively, and as the other scalers acquire more experience and learn more nearly just what is intended to go in certain grades, then they can be used in cedar also. But until they do get down to a fairly uniform basis it seems to me a mistake to publish their grading of a boom when both the logger and millman recognize it as absurd, as it only tends to throw suspicion on the whole scaling department.

With regard to the grades themselves, as interpreted at the present time, I believe they are reasonably satisfactory. Of course there is one manifest absurdity in them, in that the only place for a log shorter than 16 feet is in the Number Three grade, but that is not serious. Possibly, as a siding manufacturer, I might suggest the splitting of the present Number Two grade into two grades—a Number Two lumber log and a shingle log. The Number Two lumber log would be one which, if it were a butt log, had 16 feet that would grade Number One, or a log that had, say, one side perfectly clear and the other side rough. In good timber you get a lot of these latter logs which grew on the steep slopes. They won't cut 50 per cent. clear, but one side of the log is just as clear as a Number One. The big Northern factory logs might be classed with these also. In other words, it is the $10 to $12 log that I would call the Number Two lumber log, and the shingle log would then be the $8 log, and would cut eight to nine thousand shingles per thousand feet, log scale.

The Forest Branch report for the year 1914 gives the total production of cedar in the province as 190 million feet, log scale, of which the Vancouver and Island districts produced 168 million feet. Of this latter total probably not over 15 or 20 per cent. was sawn into lumber, nor do I believe the production of cedar lumber will ever run over 20 to 25 per cent. of the annual cut of cedar logs.

The prevalence of loose rotton knots and other characteristic defects in cedar, which so lowers the grade of the common lumber that it is impossible—in spite of its light weight—to find a market for it that will return cost, practically limits the production of cedar lumber to the clear grades, the rougher logs being turned into shingles. The most successful method of handling the production of cedar lumber has been found to be by the so-called combination mills, i.e., those specializing in clear lumber out of the select logs and allowing the rougher logs and the knotty hearts of the good logs to be cut into shingles. All combination mills are short-log mills designed to cut logs of 16-foot lengths and to reduce them to inch lumber with the least possible waste. The equipment usually found in a mill of this kind is a band or circular head-saw for breaking down the logs, with gang and either roller or carriage re-saw to cut up the cants and produce as much vertical grain stuff as possible. Large dry kiln capacity is necessary to take care of the high percentage of uppers produced, as air drying can be utilized to only a limited extent in this climate. Cedar lumber cannot be dried successfully in the fast kilns often used for fir owing to the breaking down of the structure of the wood at high temperatures, with resultant honeycombing. The United States Forest Service recommends a humidity-regulated kiln with a temperature of 140 degrees. We are using the Abernethy patented continuous condensing kiln which given perfectly satisfactory results up to 160 degrees, which is as high as we have attempted to go, drying the lumber in from four to six days according to the type of timber. The product is all shipped in the most highly finished forms, usually half-inch siding, this requiring the expenditure of a larger amount of labor per unit of production than is the case with any other West Coast wood. Then, too, the irregular shape of the logs, the large amount of waste owing to the defective nature of the timber, and the fact that it is all practically reduced to inch lumber, reduces very materially the output of any plant as compared with the output of a fir mill equipped with equal sawing equipment. From our own experience we believe the average cost of production of lumber in the siding mills is fully fifty per cent. higher per thousand than the cost of production in the average fir mill.

I believe, also, that the Coast cedar runs smaller on the average than most persons imagine. Even buying, as we do, the best logs, the bulk of the logs we get have a diameter at the top of from 16 to 30

inches. It is only occasionally, and generally in the Northern timber, that one gets a large percentage over 30 inches. In our own case we plan to buy only the very highest grade of logs that come into the market, either selected or camp run, and when camp run we sort out and sell all but the one and two lumber logs, our shingle mill capacity not being large enough to take care of the whole camp run. Formerly a great deal of factory cedar lumber was produced for door stock, etc., but this business, I believe, has passed its zenith, as experience has shown that cedar is too soft for inside finish. The problem of securing a supply of the proper quality of logs is the greatest problem we have to face. The difference in value between outwardly similar logs, to say nothing of the difference between rough and smooth logs, is very great. Just what the difference in value between the 40-inch clear log with a six-inch core, and a 40-inch log with a two-foot core, is hard to estimate accurately, but some idea can be obtained by the fact that the clear lumber is worth about $20 to $25 per thousand more than the common.

It is very interesting to stand on the log deck and watch the variation in type of the cedar from the various districts. From Thurlow Island and the Northern camps come the big soft old growth cedar with usually a rotten centre, but still the delight of cedar factory mills. It has one defect for siding, and that is that it is often dark in color, and the American consumer wants light-colored wood. But cut it slash grain and some of the most beautiful figured stock is obtained. I only wish we could preserve the colors of the fresh sawn wood, but unfortunately they darken and fade. Often in one log you will find wood almost as white as white pine, and this not sapwood, but heart wood; then a streak of reddish pink shading off into browns and sometimes almost black, but still perfectly sound wood. Some people object to the dark wood believing it is dead or rotten, but it is simply the type of growth. A year ago we got a bunch of logs from Green Point Rapids with the hearts all on one side, the rest of the log being pure clear. Rock Bay logs are soft, but without the fancy figure of the larger growth. The hearts of the Northern logs cut well into shingles, as the knots are usually spread well apart.

Most of the Southern cedar we have cut is a different type. From Stave River, the Gordon Pasha and Jervis Inlet we get a hard, coarse-grained, fast-growing, sound cedar, clear enough but very difficult to dry. Curiously enough, also, the sawdust from these logs is very deficient in fuel properties, so that it is much more difficult to keep up steam when cutting these logs. Some of these logs are almost as hard as fir and frequently will pinch on the saw and stop the whole mill. The only lot of Northern logs we have run across of this type is the little bunch mentioned before that came from Allison's camp, and their deficiency in fuel properties was immediately noticeable. Allison must have some very interesting timber in his locality, as we have received at least three distinct types of cedar from him. From Howe Sound we have had the same soft cedar as from the Northern camps, and McNair's Coquitlam River timber is about midway between the two types. The hearts of this sound Southern cedar make poor shingles, as the knots are so close together it is almost impossible to cut between them.

But important as the manufacture of cedar lumber may become, the great bulk of the timber will probably find its way into shingles. Up to the present most of the shingle mills have been accustomed to cut shingles from bolts, a large percentage of which came from the higher grade timber of this Inlet and Howe Sound. The manufacturers have also endeavored to maintain a high standard of quality, with the result that the reputation of B. C. shingles is continent-wide. But this reputation costs money to sustain. We have heard much lately from our friends across the line about the flood of cheap shingles from B. C. deluging their market. The flood consisted in 1914 of 731 million shingles, according to the figures of the American Consul at Vancouver, and this quantity represents about 6 per cent. of the estimated American-producing capacity. The "cheapness" of the product is shown by the fact that every one of those shingles was sold at a premium of from 10 to 50 cents—mostly 25 to 30 cents—per thousand over the current prices of American shingles of similar dimension. But this premium is required at the present time to offset higher manufacturing costs, and does not represent extra profits to the B. C. manufacturer. Practically everything that enters into the building or operating of a shingle mill on this side of the line is higher than on the American side, usually about 30 per cent.

Cedar lumber, owing to its weather-resisting qualities and its freedom from warping, shrinking, checking or splitting, is essentially an outside wood. It is too soft for inside finish, and the common lacks the strength for structural purposes. But for siding or outside finish it is unsurpassed. It will take and hold paint better almost than any other wood, and its light weight when dry allows it to be shipped long distances by rail. Compare freight charges by rail to, say, New York or Boston of $4.67 per M. on cedar siding with $25 to $27 per thousand on fir timbers by rail, or even $13 by the Panama Canal, and you can see how broad is the market. Of course, markets have to be sought out. In 1912 and 1913 practically the whole output of our mill was absorbed by the Canadian market, but the collapse of the building boom in the North-West caused us to seek new markets. Our products are now finding their way from Utah and Colorado through all the middle western States to the New England States, New York, New Jersey, and Long Island. Some export of shingles has also been made to Australia and New Zealand, but as yet this market has not assumed large operations.

The outlook for developing an export trade by water in cedar siding is not rosy. The product is too delicate and highly finished to be handled like ordinary timbers in and out of ships, and the tariff regulations of most countries are practically prohibitive for other than rough lumber. Then, too, in a few countries it is the fashion to use wood for the outside sheeting of the houses, so that there is no inducement for shipping the rough stock. America is, and must continue to be, the market which will consume the bulk of our supply, and apparently the market is steadily broadening. This is largely due to the increasing scarcity of pine sidings. We have also noticed indications lately that the cedar siding was displacing redwood siding in certain districts, even at a higher price, redwood not having proved entirely satisfactory.

What the future has in store for the cedar industry of B. C. we can only conjecture, but of one thing we can be sure, and that is that there will be a largely increased production of both cedar lumber and shingles in the next ten years, as holders of stumpage find their annual dues an increasing burden and endeavor to convert their equities into cash. Whether this will mean, as it has in all other lumber-producing sections, a period of large production with little or no profit to the operator, followed by a period of spectacular profits realized by those in a position to hang on till the bulk of the timber is exhausted, or whether the market will expand rapidly enough to absorb this extra production, time alone will show.

French Specifications for Railway Ties

The Weekly Bulletin of the Department of Trade and Commerce states that specifications have been forwarded to the Department by the Hon. Philippe Roy, General Commissioner for Canada at Paris, of railway sleepers, upon which tenders are invited from time to time by the State Railways of France. These specifications are reproduced herewith as they point to a probable market for sleepers of Canadian manufacture, should satisfactory negotiations take place between Canadian firms interested and the Department of State Railways, in connection with the French Government. The specifications and other particulars as they apply to French sleepers are reproduced in detail below so as to give Canadians a definite idea of the requirements:—

The specifications are intended to cover the supply, the cutting and the preparation with creosote of Landes pine railway sleepers.

The total quantity of sleepers to be supplied is indicated in the contract or the tender.

The supply will be thus composed: 20 to 30 per cent. in sleepers as per profiles 1 and 2; 70 to 80 per cent. in sleepers as per profiles 3 and 4.

Details of the Supply

The sleepers whose cross-section will be according to profile No. 1 will be sawn on the four sides.

The minimum dimensions of the cross-section are: width, twenty-four centimetres; thickness, fourteen centimetres.

Chamfers and squares will be tolerated on the two edges of the upper side, provided the top part is not inferior to sixteen centimetres.

The sleepers whose cross-section will be according to profile No. 2 will be sawn on the sides AB, BC, CD, and barked on the side AD. However, the side AB may be dressed with the axe.

The minimum dimensions of the cross-section are: width, side AB —18 centimetres; width, side CD—24 centimetres; thickness, 14 centimetres.

The sleepers whose cross-section will be similar to profile No. 3 will be sawn on sides AB and CD, and barked on sides BC and AD. However, side AB may be dressed with the axe.

The minimum dimensions of the cross-section are: width, side AB —16 centimetres; width, side CD—26 centimetres; thickness, 14 centimetres.

Sleepers whose cross-section is similar to profile No. 4 will be sawn on side CD and barked on the curved side CAD.

The minimum dimensions of the cross-section are: width, side CD—13 centimetres; thickness, 15 centimetres.

Sleepers of all profiles will have, besides, to fulfil the following conditions:—

Sleepers will be quite straight and cut with the grain; they should not offer, across the width, over a length exceeding one metre, an arrow exceeding one-thirtieth of the length considered.

Every sleeper whose lower side will be concave or convex will be rejected.

The ends of all the sleepers will be cut ending by a cross-section perpendicular to the length.

The pine timber utilized for the manufacture of the sleepers must have been cut in winter, from the 15th of October to the 15th of March; it must be perfectly sound and of the best quality, neither greasy, "rolled," frost-bitten nor overheated, spotted or blue, free from decay, rotten knots, splits, cracks, defective knots and other defects.

Trees which have been affected by fire will not be accepted for the manufacture of sleepers.

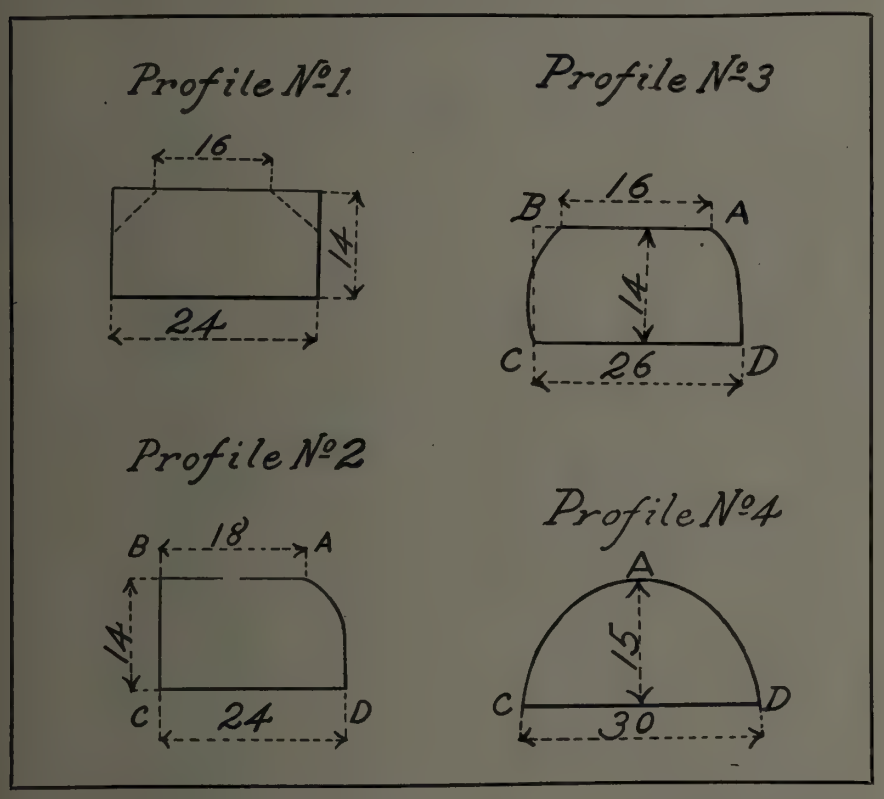
The cutting of the sleepers must be finished at the latest on June 30, and the contractor must indicate on that date the nmber of sleepers manufactured and the places where they are deposited.

Sleepers must not in any case be kept more than three months in the forest. As soon as they are sawn they will be piled up crosswise, so that the air can circulate freely so that each sleeper may be in contact with four others.

All the sleepers will be examined and checked with the greatest care as regards quality and dimensions; those accepted will be stamped at the ends with a special mark by the agents of the State Railways; they must bear besides at the two ends the contractor's brand.

The quantity of sleepers to be presented for provisional acceptance in each station must be at least 500. This acceptance will not necessitate the drawing up of reports.

The sleepers provisionally accepted will upon their arrival at the injection plants be unloaded, then piled up in regular piles crosswise to facilitate drying. Sleepers of profiles 1 and 2 and those of profiles 3 and 4 will be placed in separate piles in order to allow to ascertain



that the proportion stipulated in article 3 have been observed. They must not be in contact with the ground or water. For this purpose, they will be isolated from the ground by rafts previously injected.

The piles will be covered by two rows of sleepers forming a roof slightly inclined to facilitate the running off of rain.

The specifications then give particulars regarding the creosoting operations, and conclude as follows:—

After they are prepared, the agents of the State Railways will mark the sleepers fulfilling the conditions stipulated in the present specifications with a special brand at their two ends and will prepare a statement of provisional acceptance in triplicate.

Sleepers rejected during the course of the various operations will be piled up on the plant and the contractor will not be able to remove them or dispose of them during the length of the contract without the authorization of the agent of the State Railways.

All the transportation charges relating to the untreated and creosoted sleepers transported over the State system or otherwise will be chargeable to the contractor.

Sleepers will be again examined when unloaded at the place of delivery.

No delay of guarantee being stipulated, the definite acceptance will be made at the time of this examination. The sleepers pronounced defective will be held at the point of delivery at the disposal of the contractor and his account will be consequently corrected.

At any given time until the definite acceptance of the State Railways expressly reserve the right to refuse split ties; however, sleepers of regular grain whose cracks will not be more than 38 centimetres beginning from the ends, may be accepted after they have been fitted by the contractor with bolts or sound-holes.

The delays and point of delivery are indicated in the contract or tender.

The Bonus System in Logging Operations

By D. E. Stewart

Our company's experience with the bonus, or profit sharing system, has not been long enough or thorough enough to permit us to feel that we have anything like the last word to say about this interesting and important subject. However, a brief resume of our experience will be given with the hope of adding whatever we can to your information.

During the first three months of 1915 we used the bonus system in the falling and bucking end of our operation. For one month prior to its adoption we measured the square feet in area of each cut made by the fallers and buckers and also scaled each tree and log, keeping the different varieties of trees separate, and thus determined quite closely the proportion existing between the area in square feet in the end of a log or top of a stump and the board measure among the different species. The data obtained was very interesting, especially as to showing the cost of falling and bucking the different kinds of trees, etc., and of course showing what the men were doing when they had no special incentive to do anything out of the ordinary.

We found that there was a considerable difference in the amount cut on rough and level ground by the same men, or when some special kind of a tree predominated; and on putting into effect the bonus system we divided the crew into two classes based largely upon the topography of the ground being worked on. Separate standards were made for each class, and the bonus given consisted in dividing equally with the men on whatever they got above the standard. The results obtained were not at all disappointing; our only trouble being on account of some of the men paying too much attention to the quantity and not enough to the quality of their work. I know no reason, however, why this system cannot be applied to falling and bucking in many places to the advantage of both employer and employee, if the proper amount of attention is given to it.

Yarding and Roading

During 1914 we applied the bonus system during the logging of six rollways, to all of our operation except the falling and bucking. The plan used is probably familiar to most of you, and consisted of setting a standard in the usual manner for each rollway and paying the men a bonus based on their regular wage for each thousand feet put in above the standard. These amounts ran from 3 to 8 cents per thousand feet per man per day.

For some time prior to our adopting the system, and in order to make comparisons afterwards, we paid especial attention to watching our men for evidences of lack of interest, shirking and general indifference as to whether we got a good output or a poor one. Needless to say there were some such cases noted—and very likely always will be—though they were not numerous enough to cause any particular anxiety. On the other hand there appeared to be a decided interest among most of the men, and practically all seemed gratified whenever an unusually good day's output was obtained and during a hard show or when some bad luck was encountered there were a sufficient number of "lumberjacks' cuss words" heard to show that in any event they were not asleep. To determine, however, whether their interest in our output could be increased sufficiently to decrease, or at least not increase our logging costs was the real problem

I may state here my belief that much of the success of this system depends upon the particular logging conditions where it is tried. In our timber, which is a wide mixture of yellow fir, red fir, spruce, hemlock and cedar growing on ground which runs from level to very rough, we have been unable to find anyone who could tell any reasonable degree of certainty within 10 or 15 thousand feet per day of what a crew should average on a particular rollway. Our average per rollway has varied from 50 to 125 thousand feet per day, depending upon the stand and kind of timber and character of ground logged, and somewhat upon the weather, etc. A variation of 10 or 15 per cent. in the stand of hemlock has a decided effect upon the average per day.

Under these conditions we have found it impossible to determine at all closely what the proper "standard per day" should be, and this of course is one of the vital parts of the whole proposition. A fairly close observation of the men at work both when they were making good bonus and when they were not, convinced us that the efficiency gained was slight, and this in connection with the conditions mentioned above caused our decision that at present under our particular conditions the game was not worth while as applied to yarding and roading.

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* Address delivered before the Pacific Logging Congress.

Tension—What It Is, and How to Obtain It

Tension in a saw is a preparation of the saw to do specific work by compensating in advance for certain conditions known to arise during the operation of sawing. During the hardening and tempering processes, according to the thinness of the blade, it runs in various forms of bends and twists; in band saws it often deviates from a true line flatwise, edges still remaining parallel, but having run in a serpentine form. It is the work of the expert saw-maker to correct these inequalities arising during the process of manufacture. The saw is also susceptible to modifications in form arising from its use in the mill, and it is the work of the expert saw-filer to correct such inequalities thus arising during use.

The tensioning of a band saw ought to be more easily understood and reduced to a system than the tensioning of a circular, for the reason that band saws are, for the most part, run of an even width, with the same relative tension, whatever the width, while the circular saw varies with different diameters, speeds, and conditions of use. In a band saw, by constant and proper use of the straight edge and tension gauge, the drop may be registered to a nicety. An able filer, as a result of study and investigation, should arrive at a condition for the fitting of his saws, to suit the particular band mill and the work in hand, that should continue practically uniform. A filer who is able to keep his saws in condition to accomplish uniform and satisfactory results is entitled to, and may expect, good remuneration for his effort, while his employer may likewise expect a proper daily average output.

To secure proper action of teeth the toothed edge of the saw should be the shortest or firmest. The tendency of the saw while in operation, and as a result of the processes of sharpening and swaging, is toward a "fast" condition—that is, an expansion of the edges longer than the central portions. This tendency must be constantly counteracted by the processes of hammering or rolling for tension, whereby the central portions of the saw are expanded and made longer than the edges, and the back edge made longer than the toothed edge in various degrees. The weight or strain used on the mill is calculated to create a frictional contact between the saw blade, which is simply a belt of steel, and the band wheels, sufficient to overcome the resistance of the lumber to the action of the saw in the cut, and this forcing apart of the wheels by the strain on the mill exerts a strain on the saw which is greatest on the toothed edge, because the remainder of the saw has been given more tension or expansion. In this process of sawing there is added to the above longitudinal strain on the saw a lateral strain, due to the feed of the timber to the saw, and this feed must be directly proportioned to the excess of strain in the toothed edge over the remainder of saw, or the saw will not cut to a line. The sawyer must so direct the feed that this lateral strain of the saw in the cut shall not exceed the longitudinal strain of the cutting edge, or, in other words, must vary the feed according to the size and clearness of the stock being sawn. It will also be apparent that the prevention of cracks, or the preservation of the life of the saw, must depend very largely upon the avoidance of all unnecessary strains upon the saw, whether longitudinal or lateral. A band saw running on a mechanically straight line is much more efficient than one running on an irresponsible wave line. When the saw is properly tensioned, if you apply a straight edge to the back of the saw, longitudinally, the saw shows convex, and if applied to side of saw it will show flat all along the blade. Place the saw upon the mill under the strain, and it becomes a straight belt of steel, with the toothed edge so tight that it is opposed to cut to a line. It doesn't always do so, however, as many a lumber pile testifies.

The exercise of care each day, and the close examination of the saw as it comes off the mill, mark the successful filer. The special work each time may be little, but it is the "stitch in time." It means an ultimate saving of time and of saws. Look for the tight spots. Make sure the tooth side is not convex. So doing, the work of fitting is reduced to a minimum unless you strike iron or stone, or have a saw pulled off the wheels.

Band saws are bound to stretch on the toothed edge, and when so stretched are likely to crack. In testing the edges, lay the saw flat on levelling bench, test the back with straight edge, and if a hollow spot is found use the round face hammer, or the rolls, along the section thus requiring expansion, having regard to not taking out the tension, which you will do if you work along the edge without going into the body of the saw. If you use a hammer, use it so as to avoid any marks or indentations. Have the back of the saw touch the straight edge throughout, or, better still, have the back full or convex. Thus the tooth edge, being the shortest edge, when subjected to strain is drawn tight or straight, and passes through the cut on a line, whereas, if longer than the back edge, it would tend to wave or kink, thus causing a constant vibration of the blade.

In applying the straight edge, mark only the highest spots, being careful to mark directly on these lumps. A straight edge, in testing tension, should not be rocked or leaned, but applied as nearly square as possible. A north or east light is best, and light should strike saw from but one direction.

The tension in a circular saw is like the tyre on a wagon; it holds and steadies the inner portions. It is somewhat similar in the case of a band saw. The reason why the back edge may be slightly longer than the front is that the strain of the weights on the mill, and the friction arising from the saw incut, which is fifty per cent. or more, greater on the front edge than on the back, causes heat, which expands the blade to a certain degree, and more on front than back. If this difference in length of the two edges is made equal to the expansion of the saw in operation, then the saw will cut to a line and with no tendency to crack. But if you get the back too long, so that the expansion of the toothed edge cannot compensate for this, then the front will crack, as it cannot stretch enough. If you could examine the saw in operation at full speed, you would find little or no tension apparent, because the heat draws the tension and makes an even strain on the full blade.

Both filer and sawyer have to do with the preservation of tension. The sawyer should see that the guide is neither too tight nor too loose after each changing. The guide must be in perfect line with the carriage or feed roller. Sometimes a chip falls between the guide and the saw, and wedges in so tightly that it cannot be removed until saw is brought to a standstill. Before this can be done, the saw will be in bad condition. The tension is out, and it may be cracked or spoiled entirely.

Improved Logging Camp Service—Modern Camp Buildings

By C. S. Martin*

In presenting a few ideas on "Logging Camp Service" to this body, representing the best of the logging industry in this country, you may be sure that it is done with due appreciation of the many able papers that have been presented to former Congresses on this subject and with the knowledge that about everyone here has different conditions to meet in his own operation. So if you will regard this as simply a recital of our own conditions and our plan for meeting them I will be content if I can present a few new ideas.

We hear a great deal of talk on efficiency these days, until in many cases it seems almost as though the word "efficiency" were associated with any new theories anyone cared to advance as to how this or that business should be conducted, quite often with little or no regard for the main factors governing one's own local conditions. The bedrock on which any scheme of good business management rests, in industries which employ a good deal of labor, is undoubtedly the well-being and proper living conditions of the employees. I do not believe that any other part of one's investment pays better dividends than that spent in keeping the men in a mental and physical condition that will not only enable them to desire to give a good day's work to their employers, but will make them feel like working, with a real interest in their work, instead of looking on it as drudgery to be gotten over with as soon as possible. No one thing will serve to bring this about so well as to let them see that the employer has a real and personal interest in them.

Few industries are so situated that they require as hard physical labor and as long working hours as the logging industry. Such being the case we should endeavor constantly to improve our working conditions as circumstances permit. Give the men good, attractively prepared food and living quarters that will insure a good night's rest with proper ventilation.

The advantages of camps on wheels are coming to be widely recognized. The first cost may be greater but when one takes into consideration the following arguments in their favor it will be found that they prove cheaper in the long run, giving the camp a life of from five to twenty years, which is, I believe, conservative, as there is no reason why properly constructed camps should not last that long or even longer.

1. Insurance.

In case of fire the camp can be moved at a few minutes' notice.

2. Depreciation.

Ten per cent. should cover both depreciation and upkeep, much smaller percentage than had to be charged to the old shack camps which cost nearly as much to tear down and rebuild as to abandon them.

3. Wages and time saved in moving.

We moved camp No. 3 this spring; yarded 249 M the day before moving, 269 M the day we moved, and 257 M the day following the move. The move was about four miles. The men took dinner in the old camp and supper in the new without losing time at the yarding. As the camp carries its own 1,000 gallon water tank it could give the men their usual accommodation on a switch or siding if necessary. This was for a camp of 160 men. I have known instances and so have most of you, where such a move would keep most of the crew busy for several days or at least for one day. A

* Address delivered before the Pacific Logging Congress.

Bartram Brothers

Limited

Ottawa, Ontario

Some of our stock on hand unsold. October 15, 1915

Devon, Ont. C. P. Ry.

NORWAY C. & C. F.

	Feet
1 x 4 and up x 10-16	7,575

NORWAY MILL RUN

1 x 4/5 x 10-16	1,382,815
1 x 6 x 10-16	407,000
1 x 7 x 10-16	101,222
1 x 8 x 10-16	46,191
1 x 9/11 x 10-16	31,000
1¼ x 4/6 x 10-16	90,000
1¼ x 7 and up x 10-16	200,000
2 x 4 x 10-16	115,000
2 x 6 x 10-16	141,379
2 x 8 x 10-16	240,865
2 x 10 x 10-16	69,000
3 x 4 and up x 10-16	165,352

NORWAY CULLS

1 x 4 and up x 6-16 No. 1 and 2	706,002
1 x 4 and up x 6-16 No. 1	291,285
1 x 4 and up x 6-16 No. 2	219,990
3 x 4 and up x 6-16 No. 1	165,352

WHITE PINE GOOD

1 x 4 and up x 6-9	1,600
1 x 4 and up x 10-16	10,067

WHITE PINE MILL RUN

1 x 4/5 x 10-16	123,460
1 x 6 x 10-16	16,100
1 x 7 x 10-16	60,585
1 x 8 x 10-16	14,969
1 x 9/11 x 10-16	20,100
1 x 10 x 10-16	2,550
1 x 12 x 10-16	9,912

Devon, Ont. (Continued)

WHITE PINE MILL RUN

	Feet
1¼ x 4/6 x 10-16	40,000
1¼ x 7 and up x 10-16	68,000
1¼ x 4 and up x 10-14	100,000
1½ x 4 and up x 10-14	200,000
2 x 4 and up x 10-16	4,311
3 x 4 and up x 10-16	109,696

WHITE PINE CULLS

1 x 4 and up 6-16 No. 2	120,160
2 x 4 and up x 6-16 No. 1	5,537
3 x 4 and up x 6-16 No. 1	54,221
3 x 4 and up x 6-16 No. 2	8,516

MILL RUN LATH

1½—32-in. White Pine	186,000
1½—32-in. Norway	515,650

Barachois, Que. I. C. R. or Boat

SPRUCE MILL RUN

1 x 4 x 10-16	199,197
1 x 5 x 10-16	354,226
1 x 6 x 10-16	387,930

SPRUCE CULLS

3 x 4 and up x 6-16	260,000

Montreal, Que. Basin No. 3

SPRUCE CULLS

1 x 4 and up x 6-16	137,079
Largely 6 and 8 in.	

We are selling this Norway and Spruce to shell box manufacturers in the narrow widths to replace 9", 11" and 12". Most of this stock is 1914 sawing.

"Specialists in Quick Shipments"

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Slabs and Edgings

Slabs and Bundled Edgings, Hardwood and Softwood. Quote cash prices. Box No. 248, Canada Lumberman, Toronto, Ont. 19-22

Wanted

To buy, some No. 1 Cedar Ties. Apply Box 242, Canada Lumberman, 347 Adelaide Street West, Toronto. 17-20

Wanted Lumber

Soft Elm, 1½ in., 2 in., 2½ in., 3 in., 3½ in., 4 in.; also Birch 1 in. and 1½ in. Describe fully with lowest cash prices to Standard Hardwood Lumber Company, Owen Sound, Ont. 19-t.f.

Cedar Poles Wanted

The Hydro-Electric Power Commission of Ontario, Continental Life Building, Toronto, Ont.,

will require 20,000 Canadian Cedar Poles—Eastern Cedars preferred—35 ft. x 7 in. and upwards in length for delivery during the season of 1916.

Full information may be had upon application to the Chief Engineer. 20-21

For Sale–Lumber

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

About 1,000,000 feet if Hemlock, cut August 1914, well manufactured and carefully taken care of. Write for sizes and price to The Wm. Cane & Sons Co. Limited, Newmarket, Canada. 17-20

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.

375 Pieces 1 x 15 and up 24 ft. Cypress.

Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
Montreal, Que.
e

For Sale by Tender

The undersigned has been instructed to offer for sale, a large stock of unmanufactured lumber especially suited to the manufacture of hockey sticks, the property of The Salyerds Manufacturing Company, Limited, Insolvents, Preston, Ontario.

Tenders for the purchase of the above mentioned lumber will be received by the undersigned up till noon on Monday, October 25th, 1915.

Tenders must be accompanied by marked cheques, payable to the undersigned, for five per cent. of the amount of the tender. A further sum equal to ten per cent. of the amount of the tender shall be payable on acceptance thereof. The balance of the purchase price shall be payable on or before November 15th, 1915, when the sale is to be closed. The highest or any tender will not necessarily be accepted.

For further particulars and terms and conditions of sale, apply to the undersigned.

Dated at Preston this Seventh day of October, A.D. 1915.

HARRY C. EDGAR,
Assignee for the benefit of the Creditors of the Salyerds Manufacturing Company, Limited, Insolvents, Preston, Ont.
20 Preston, Ont.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

Woods superintendent wants position, twenty years' experience with teams and railroad equipment of all kinds. Pine, Hemlock and Hardwoods. All kinds of ground. Will go any place. Can furnish good references. G. O. Sharp, Reynoldsville, Pa. 19-22

For Sale–Machinery

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Sawmill Equipment

FOR SALE.—One No. 2 Garland Carriage with track, patent set works, friction receder and off set, suitable for 10 in. or 12 in. steam feed. This carriage will be shipped in first-class order.

One Steel Boiler, 75 h.p., nearly new. 75-ft. of 26-in. stack.

One 50 h.p. slide valve Engine.

One 75 h.p. slide valve Engine, Whitlaw of Woodstock, with pulley fly wheel 11 ft. diam, 16 in. face. These engines are in first-class condition. Prices and terms on application.

The Stone Lumber Company, Limited,
19-20 Marksville, Ont.

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.

1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3½-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Miscellaneous

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including.—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Developing Eastern Markets for Douglas Fir

In the market extension work which is being conducted on behalf of the lumber industry by the Hon. W. R. Ross, Minister of Lands for British Columbia, the export propaganda has naturally attracted most attention from the public on account of the immediate results secured. As is well known, no less than thirty million feet of lumber is being shipped on vessels especially secured for this purpose, this quantity representing little less than the total provincial export for 1914. The gratifying feature of this business is the large proportion of low grades that have been marketed. As far as the lumber market for Douglas fir is concerned, Mr. Ross's department during the past few months has acted in conjunction with the industry in handling a very considerable volume of business.

This work, however, has not been allowed to interfere with a similar campaign directed at the domestic market both in Eastern Canada and the Prairie Provinces. In Eastern Canada a fine exhibit of B. C. timbers was shown at the annual exhibition at Toronto, and proved of much interest to Eastern buyers, many of whom have written to the Minister of Lands concerning the difficulties that have been felt in marketing British Columbia forest products in many parts of the East because the consumer, architects and the trade generally know so little about the uses and qualities of the Western woods, and congratulating him on the progressive advertising methods adopted.

It is planned to continue this missionary work in the East by establishing a branch office and exhibit in Toronto, and thus to ensure that architects, contractors, government departments and municipal bodies in the East are made fully cognizant of the advantages of using British Columbia woods.

In the Prairie Provinces the work has been vigorously taken up along similar lines. A permanent exhibit has been placed in a prominent position in the Industrial Bureau in Winnipeg which will show in an effective manner the many forest products of British Columbia which are, or which should be, marketed in the Prairie Provinces. Other exhibits will be prepared for annual fairs and travelling exhibitions.

The publicity campaign to increase the consumption of British Columbia lumber by the Prairie farmer is, however, the main line of work. In co-operative agreement with the agricultural authorities in Saskatchewan a series of bulletins dealing with farm buildings have been in course of preparation. Temporary work by officials of the Department has been carried on in the Prairie Provinces since April last, and this is now to be continued by the establishment of a branch office located at a central prairie point. By personal work on the ground this office will supervise and follow up the general publicity campaign designed to increase the consumption of British Columbia lumber on the Praries just as the sale of British Columbia fruits has been pushed by the provincial authorities. Through co-operation with the lumber manufacturers and their salesmen on the prairies every opportunity of increasing the sale of British Columbia lumber will be taken advantage of.

Mr. Houston, of Nelson, B. C., who has had a long experience in all phases of the lumber business and who, as a lumber salesman, is well acquainted with the territory to be covered, is assigned to this branch of the market extension work.

A Massive Pine Tree

Mr. Wm. Sullivan, foreman for the Colonial Lumber Company, Pembroke, Ont., tells of a massive pine felled by two men on the Kippewa operations. The tree measured 128 feet long, and was 61 inches on the stump and 11 inches at the top. Mr. R. McMullin claims he heard the tree fall four miles away. The tree was measured by A. G. Seabrook, culler, and assistant culler Geo. Welk. The number of board feet was 4,958, Quebec table.

camp of this size costs around $350 a day to operate, so a little time saved makes quite a showing.

4. Class of men attracted to a camp of this sort.

A good many men in the woods would rather work in a camp where the living and working conditions are right than in another camp where the wages may be a little higher but the living conditions poor. We do not give the camp all the credit for this by any means. A large part of it is due to the foreman you have and his ability to handle the better class of men. The fact remains that in Camp No. 3 during the time it has been operated we have had more "top" men (who were foremen and hooktenders in normal times) than in any other camp of which I have knowledge. And it showed up in the work. Operating in a scattering "show" we got from two to four more cars a day than we had counted on, due very largely to the class of men we had in our rigging crews.

We hold our men. Some have worked for this company for fifteen years; the majority have been here for the past four or five years. I have never heard of knockers around the bunkhouses; every one boosts for the camp. That is the biggest sort of an asset.

5. As the camp can be moved more cheaply than a more permanently located camp, we can move oftener and keep the men nearer their work. There are often small, more or less isolated pieces of timber to be picked up now and then and a camp on wheels is very handy in such instances.

6. Requires a smaller camp ground and less clearing to do. A space 60 feet wide by 400 feet long will serve for a three side camp.

7. Such a camp costs from $9,000 to $12,000, depending on the material you put into it. In terms of a one "side" camp this amounts to from $3,000 to $4,000 a "side," which is reasonable even when considering the cost of the old-time board shack camps. One side camps on wheels have been built in our country at a cost of $4,000 to $7,000, everything except the bunk cars and perhaps the blacksmith ship being the same for a small as for a large camp.

Our camp consists of 12 cars mounted on trucks rated at 60,000 pounds, with a 3¾-inch journal. The cars are built on a base consisting of six 6 x 12 longitudinal sills supported by 10 x 14 body bolsters and 10 x 12 end sills. These are reinforced by six 1¼-inch truss rods extending the length of the car. Iron plates ⅝ x 12 inches on the end sills take up the tension, which is kept high enough to keep the cars from sagging in the middle, very necessary for cars 60 feet in length.

The cars are built of 6-inch drop siding of good grade, and ceiled with 6-inch beaded ceiling. Windows and doors are sliding and a cupola roof raised about three feet above the main roof gives room for ventilating transoms which are regulated by transom lifts. The cars are painted yellow with white trimmings on the outside and gray in the interiors. The main roof is shingled; the cupola roof is covered with corrugated roofing. The oil, waste room, and toilet are built on small separate sleds. The oil and waste room is set somewhat to one side to minimize the fire risk.

The cars are set in a double row, six on each side, with a walk running down the middle which is connected with the various compartments by movable steps. The kitchen and store room are connected by an overhead walk, and the kitchen on the inside of the camp. The general arrangement can be better understood from the photographs than from a description.

The toilet is as well built as the rest of the camp, and has screened ventilators and covered seats so arranged that they close automatically when not in use. It is electric lighted the same as the rest of the camp, with lights both inside and over the door outside.

The hog pens are situated at the headquarters camp, and all the swill is hauled from the logging camps in sanitary covered cans.

As the cars are located near the main track they may be easily steamed out when the need arises to discourage the superfluous inhabitants that come in the blanket rolls of itinerant workers.

Steam heat is furnished by a 35 horse power internal fire return tubular boiler, which is supplied by a 1,000-gallon fuel oil tank and equipped with an automatic burner. This engine also supplies the power for the 4½-kilowatt, 200-light dynamo which is situated in an adjoining room. The engineer in charge of the engine and dynamo has a bunk in the dynamo room.

The kitchen is modern in every respect. Has a triple range with hood, two double decked zinc covered serving tables on castors, built in drawers and bins, raising closet and hot water tank. Coal is used for the range, as we find it cheaper than keeping a man to cut wood.

The dining rooms seat 170 men easily, and are situated one on each end of the kitchen. The bunk room for the kitchen force is in one end of the smaller dining room. We use heavy crockery dishes, as they are easier to keep clean and have no enameled surface to chip off into the food.

The office car contains, beside the sleeping rooms for the office force, a store room and the civil engineer's room, which has skylights, a draughting table, map racks, instrument closet, and a double bunk for the engineer and his assistant.

The bunk cars are 60 feet long and are divided into three compartments accommodating ten men each, or 30 men to the car. Each compartment has a sink with hot and cold water, five double iron bunks, steam radiator, shelves and hooks for clothes and individual soap dishes. As there are 15 of these compartments they are numbered on the outside to avoid confusion. The warm water is obtained by turning the live steam into the cold water pipes.

The bath room is equipped with six shower baths and a dressing room. The company furnishes the soap. At the other end of the same car is a drying room for the men's clothes, equipped with steam coils. A 75-pound pressure is kept here and the clothes are thoroughly dried in an hour to an hour and a half.

The meat room is in one end of the store room and is located just under the water tank. It is zinc lined and has sawdust-filled walls.

A reading and writing room 14½ feet by 22 feet is situated at one end of the store room.

The cars are all electrically lighted and have small lights over each door, keeping the whole camp well lighted on the long winter evenings. Lights are out at 9 p.m.

In planning these camps Superintendent McDonald sent A. E. Brown, who can make anything or build anything that could possibly be needed around a logging camp and do it a little better than anybody else, around the country to study other logging camps and get ideas. Mr. Brown drew the plans and built the cars. In building a second camp along these lines we believe we can materially cut the cost of approximately $1,000 the car, due to our experience in building this first camp. About the only changes so far suggested are somewhat heavier trucks for cars of this size (14½ feet and 15 x 60 feet) say with a four-inch journal, and a cooling closet to go in the meat room to be equipped with cold water coils and a well-screened cold air circulation.

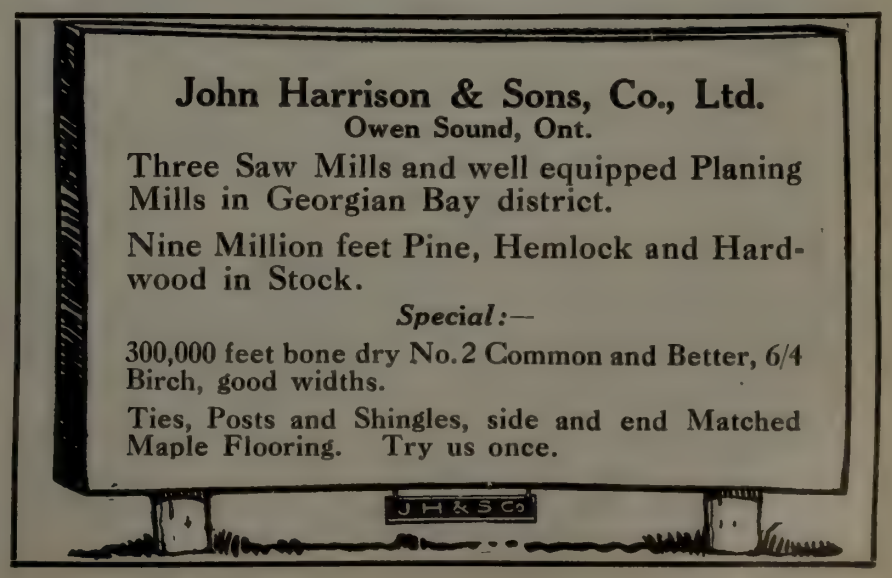
We are well satisfied with our camp investment and plan to build additional camps of this type as they are needed.

Timber Rangers Hold Conference

A conference of timber rangers in the Dominion Railway Belt was recently held at New Westminster, B. C. Mr. R. H. Campbell, Director of Forestry, was present at the meeting. Reports were submitted showing that comparatively little damage had been done to standing timber this year by fire. Interesting discussions were held in connection with various important subjects relating to the prevention and fighting of forest fires. Figures presented by the chief clerk of the timber office showed that there has been 257 fires in the Railway Belt during the year. Although 10,000 acres in slash had been burnt over, only 24 of the threatened timber berths had been scorched. The only fire that did real damage was at Sawmill Creek, six miles beyond Yale, where it is estimated that 485,000 feet of lumber was destroyed.

E. Long Manufacturing Company Report a Successful Year

The E. Long Manufacturing Company, of Orillia, Ont., manufacturers of sawmill machinery, have recently made several large installations of machinery in mills in various parts of Canada, the latest being at the plant of the Monteith Pulp & Lumber Company, Monteith, Ont. The E. Long Mfg. Company, Limited, closed their financial year for 1915, on August 31st, and, in spite of the disturbed conditions of trade in Canada during the past year, they succeeded in securing the same amount of business in 1915 as in 1914, which was a banner year with them.


John Harrison & Sons, Co., Ltd.
Owen Sound, Ont.
Three Saw Mills and well equipped Planing Mills in Georgian Bay district.
Nine Million feet Pine, Hemlock and Hardwood in Stock.
Special:—
300,000 feet bone dry No. 2 Common and Better, 6/4 Birch, good widths.
Ties, Posts and Shingles, side and end Matched Maple Flooring. Try us once.
J H & S Co

Review of Current Trade Conditions

Ontario

Some improvement is reported in the lumber business at Ottawa. Enquiries from the United States have recently been more numerous and they indicate the possibility of some increase in business. Stocks of lumber at Ottawa mills are heavy. English buyers have taken up their usual lines this year, but shipments have been very slow, owing to the scarcity of vessels. There is quite a scarcity of good men for the bush this year, as many of them have enlisted. Wages have accordingly advanced to some extent. Most of the Ottawa Valley mills will close down at the end of October, a month earlier than usual.

Trade in hardwoods shows a little improvement. Most of the stock moving at present is special stuff for the War Office. The shell box trade is eating up a great quantity of hardwoods and softwoods. In fact, it is cleaning up a large portion of available hardwood stocks. This applies to beech, birch and maple. In the other lines there is apparently a little more buying from the piano and furniture trades, although it is not heavy as yet. This is thought to be an encouraging sign, as, when the piano trade commences to pick up there is no doubt that general trade conditions are improving. A little more interest is reported on the part of retail yards, and they are enquiring more frequently regarding stock. The yards do not seem to be doing any buying as yet, but their increased enquiries are quite noticeable. In the building material line there is practically nothing to report. Hardwood culls are very quiet. Narrow 1-inch birch is slow. Basswood is dull. Elm also is quiet, that is to say, thin elm. Heavy stuff in general is moving fairly well.

Eastern Canada

Reports from Montreal indicate a slight improvement in trade conditions, chiefly on account of the extensive demand for shell box material. A number of factories which have secured contracts for shell boxes are working day and night. There are over a dozen firms engaged in this work in Montreal. Outside of the box business, the lumber trade is slow. Building operations are still showing a decrease. Local yards at Montreal have allowed their stocks to run down almost to nothing and are replenishing only to the extent of their immediate requirements. The export trade with the United States continues on a fair scale. For shipments to the Old Country tonnage continues scarce. During the balance of the season, shipments will be light. Ocean freight rates are still very stiff and further advances are quite probable.

Sales of dimension spruce at Boston are being made by some wholesale houses at $22.50 base, but some manufacturers who have been quoting $23 state that they have so many orders on hand that they will not take any more business under $23.50 base. There is a fair demand for frames. The wider sizes of random are slow, but the medium and narrow widths are moving well at the following range:—2 x 3, $19.50 to $20; 2 x 4, $20.50 to $21; 2 x 6 and 2 x 7, $19.50 to $20; 2 x 8, $21.50 to $22; 2 x 10, $23 to $23.50; 2 x 12, $23.50 to $24. Hemlock boards are still offering abundantly at Boston. Eastern clipped boards, 10, 12, 14 and 16 feet are selling at $19.50, and some carry loads at $19. Offerings of shingles at Boston are heavy. Good white cedar extras are quoted at $3.40 for the best, down to $3.15 for passable shingles. Clears are selling at $2.70 to $2.80 and second clears at $2.25 to $2.40. There is a better demand for red cedar shingles, especially the very good ones. The best extra red cedars are bringing $3.50, and some of the poorer makes can be had at $3.15 and $3.20. Lath appear to be considerably firmer. Offerings are not so heavy and the retail yards are buying very freely. For prompt shipment some manufacturers are quoting $4.25 for 1⅝ in. Most of the transactions, however, are around $4.15. For 1½ in. the demand is improving and $3.60 is the normal quotation.

Great Britain

Latest reports from Great Britain state that the c.i.f. spruce market is particularly strong, and that the tendency is in an upward direction. Tonnage has been extremely difficult to secure at any price at all. Recent cargoes received by west coast brokers have realized much better prices. Brokers who may not have been receiving prices equal to shippers' ideas have been content to put their supplies into stock, expecting better prices soon. Apparently there is no likelihood of freights becoming any easier for some time. Owners of liners freighting between St. John and Halifax and Manchester and Liverpool have refused 160 shillings per standard. Consignments by liners during the winter will therefore almost certainly cost £1 or 20 shillings per standard more than the prices ruling to-day.

The spot market at London continues brisk, although the drawbacks to its smooth working are becoming more pronounced daily. Prices are quite firm and the demand in general is still very active. Deliveries at London docks for the latest week for which figures are at hand, that ending on September 11th, amounted to 6,599 standards, as compared with 4,406 standards during the corresponding week of last year. At Foy, Morgan & Company's recent auction sale 3 x 9 u/s St. John spruce sold at £16, and 2½ x 7 ditto at £15 10 shillings.

The market for spruce deals to arrive at Liverpool is steady, with an upward tendency. There is a better tendency also in connection with spot values. During the past fortnight the import has been high, but the consumptive demand keeps up, and there is very little prospect of it diminishing. The c.i.f. market for birch is very strong and the tendency is upward. Spot birch values are well maintained, and recent arrivals are going into consumption almost immediately upon being landed.

United States

If one measures the situation in the lumber trade generally to-day by that in the yellow pine trade, he will come to the conclusion that an upward turn has at last become quite noticeable. Statistically, the yellow pine situation is interesting. In August 157 mills in the association produced 384,590,000 feet of lumber, or an average per mill per day of 94,230 feet, making an average weekly output of 565,380 feet. During the week ending September 25th the mills shipped 672,000 feet. Thus, on the basis of the output of August the shipments were equal to 118.9 per cent. of the production. The orders received covered 725,000 feet, or 128.4 per cent. of the production. During August the total shipments of the Southern Pine Association were 412,400,000 feet for the 157 mills referred to above, whose cut was 384,590,000 feet. In the North Carolina pine territory, August shipments were also larger than the cut. The report of the National Lumber Manufacturers' Association shows that shipments during August were only 1½ per cent. larger than the cut, for the softwood industry, and only slightly larger than the cut for the entire industry. Improvement in southern yellow pine, however, and in other woods, makes it seem certain that the lumber business, almost for the first time in two years, is now statistically on a sound basis, characterized by an excess of shipments over cut, reduction of stocks and piling up of orders for future shipment, all of which are bringing about steady price advances.

In the hardwood industry, although statistics do not show any material improvement in regard to the relative positions of shipments and cut, it is expected that this condition will be improved very shortly. During the past few weeks quite a noticeable improvement has developed, partly the result of increased building operations and partly the result of greater manufacturing activity. The increase in shipments of war munitions abroad has made an appreciable addition to the demand for hardwoods that are used by the box industries.

As to particular markets, that of Chicago is interesting. It shows a general improvement in the demand. Yards are doing a good steady trade at prices which are fairly satisfactory. So long as pleasant weather continues these conditions will probably last. A heavy building movement is noticeable in the outlying districts of the city. Some improvement is reported from Buffalo in the demand for northern pine, but the trade is still rather quiet. There has been a fair demand for pattern lumber. Prices for the building grades are not strong, as competition from other woods is very keen. Lower grades are holding their own. There is a good assortment of stocks. A better tone is reported in the market for northern pine at North Tonawanda. The demand for hemlock at Buffalo continues steady, but retailers are only buying in small lots, as they do not think the future looks certain enough. Stocks are plentiful. North Tonawanda dealers state that they are doing an increased business in hemlock.

Canadian Tool Handles Wanted in England

The Weekly Bulletin of the Department of Trade and Commerce, in its issue of October 4th, says:—"The war has brought a great demand for miscellaneous tools and, on the other hand, has restricted in a large measure the available supplies of wood handles suitable for use in connection with such tools. Inquiries for these handles have been frequently made by local dealers, who apparently find much difficulty in securing adequate supplies. It would accordingly be interesting to hear from Canadian firms which make not only handles for picks, shovels and spades, but also for the great variety of the smaller tools of this description."

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

Ottawa Trade a Little Better

Ottawa, October 6th (Special to the Canada Lumberman):—There has been a noticeable increase in the number of inquiries from the United States lately, not only for box lumber, but for better grades. Though the enquiries have not been followed by orders, there is a general feeling among lumbermen that business will follow. Though the demand for box lumber, such as spruce and birch has been fairly heavy recently, there has been no alteration in prices, but if the demand continues it is predicted that there will be a slight increase.

All the lumbermen in Ottawa and district have fairly heavy stocks on hand. The market this year is not so good as last year, but some firms have made good sales. English buyers have taken up their usual lines, but none are being shipped, owing to the scarcity of boats and the high cost of ocean freights, which is still around 165 shillings per standard, with prospects that it will go still higher before it decreases.

When the season opened for sending men to the bush, there was no dearth of good men offering themselves. The situation now is different. Recruiting for the overseas battalions has been brisk in this district during the last few weeks, and many lumberjacks have responded to the call to the colors, so that now, when good men for the bush are wanted, there are few to be found and an advance from $22 to $26 per month as high wages has not been productive of the desired result to the extent hoped for.

Most of the mills in the Ottawa Valley are making arrangements to close down at the end of October, a month earlier than has been the case in other years. However, the employees realize that they have been kept on in some cases already longer than business and general conditions in the trade really warrant. Mr. George Millen, general manager of the E. B. Eddy Company, of Hull, said a few days ago that his firm intends to keep all departments of the plant running full time all winter, and that few men will be laid off when winter sets in.

There is likely to be considerable activity in box making later on. The Shell Committee announced a few days ago that they are making arrangements to place orders for shells worth $80,000,000 for the Allies. Most of the orders are to be placed in Canada. Up to the present, box-making firms in Ottawa and district feel that they have hardly had their share of orders for shell boxes. So far, only four firms in the city have received orders for boxes, each being given a contract for 25,000. One firm here can turn out easily 2,000 high grade boxes daily. It was given an order for 25,000 a few weeks ago and turned them out on time, and in such a way as to give marked satisfaction. To-day the firm is doing very little work and would appreciate a substantial contract.

Lieut. D. J. O'Donohoe, secretary-treasurer of the McAuliffe-Davis Lumber Company, who joined the 77th Battalion, C.E.F., in training here, has had his organizing and general ability recognized by being promoted to adjutant. He is very popular in the Battalion and is recognized as a remarkably efficient officer.

Montreal Trade Busier

Montreal, October 8th (Special to the Canada Lumberman):—There is a slight improvement in the lumber trade, due to the increasing demand for material for making shell boxes. The factories with contracts are working at great pressure to turn out the boxes, for which there is an insistent demand. Some of the contracts are very large, and in the city over a dozen firms are engaged on this work, two or three buildings having been specially equipped by companies who were previously not connected with the lumber industry. Furniture factories, too, have taken up box making, their own line being very dull. In some factories there were initial difficulties owing to want of experience, but these are gradually disappearing, and the output is being considerably increased.

Apart from the box lumber section, business is slow, construction work showing a decrease. The building permits continue to dwindle; for last month the total is $350,896, a loss of $200,618, as compared with the corresponding period in 1914. The aggregate for the year is $4,512,258, a decrease of $8,197,433. Local yards are reported to be bare of stock, retailers only buying for immediate needs.

Trade with the United States is about holding its own, and is on a fair scale.

Largely owing to Government requirements, tonnage is very scarce, and shipments of lumber to the United Kingdom are therefore curtailed. It is expected that comparatively small quantities will be exported during the balance of the season, in addition to the Government requirements, large quantities of grain and provisions are being sent to the other side, and these have preference over lumber. Rates have considerably stiffened with prospects of still further rises.

Sulphite is a very strong market, and prices have materially advanced. This is in sympathy with the rise in Europe, where the cost of production has increased, and also because of the smaller European imports into the United States. It is probable that quotations will go still higher.

The ground wood market is slow and easy, there being little demand from the United States. Newsprint is better, with more inquiries.

Mr. C. E. Read, the secretary of the Riordon Pulp and Paper Company, has been elected a director of the Spanish River Pulp and Paper Company.

Parrsboro Shipments for the Present Year

Parrsboro, N.S., Oct. 4th, (Special to the Canada Lumberman):—Since the first of April 675 vessels have entered the port of Parrsboro and 663 vessels have cleared. These are record numbers, and are due in part to the use of smaller vessels than usual in carrying deals to England.

The lumber shipments from Parrsboro to the United Kingdom during September aggregated 3,894,000 superficial feet of spruce and hardwood deals and scantling. The only exports to the United States during the same period were 200,000 feet of spruce boards and 1,150 pieces spruce piling. Several cargoes, however, were exported from adjacent ports.

Four barks and one steamer are now loading lumber in Parrsboro Roads for the United Kingdom. The steamer and three of the barks are Norwegian, the other bark is Danish. Another Norwegian bark sailed from Havre on the 11th of September for this port.

Deal freights are still soaring. The Norwegian steamer Ydun, now loading here, is getting 150 shillings per standard. The owner of a Parrsboro twin schooner has been offered 155 shillings to load here, or in this vicinity. This is the highest price yet reported here.

An Interesting Analysis of Operations

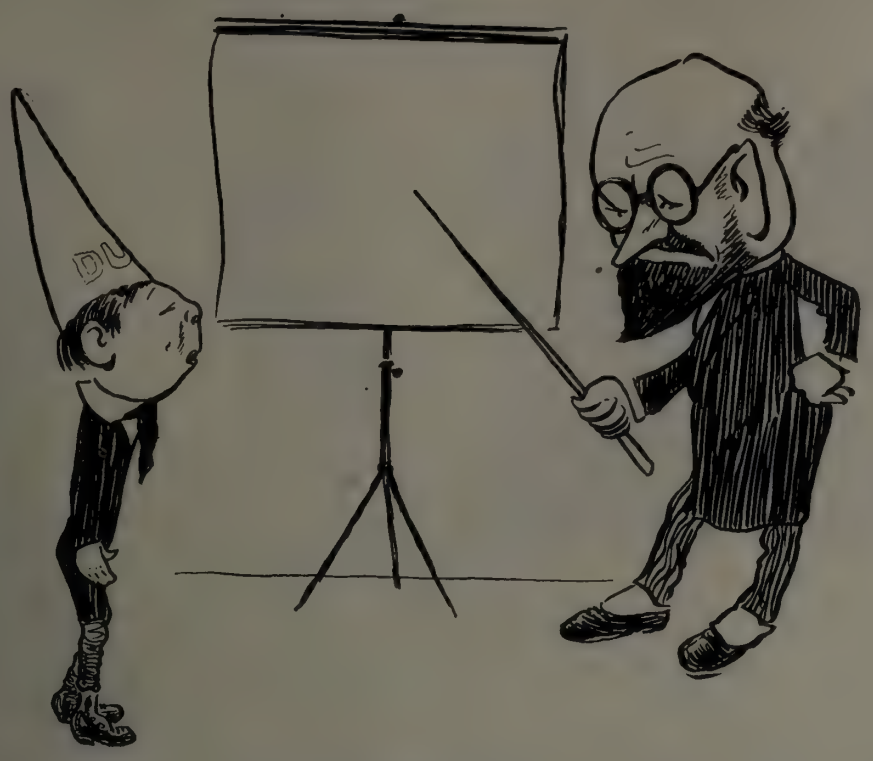
The United States Government, through its Forestry Laboratory at Madison, Wisconsin, has recently investigated lumbering operations in the Central States. Among other saw mill plants visited, was that of the Stearns Salt & Lumber Company at Ludington, Michigan.

The report of Mr. F. H. Hallauer the forestry engineer who investigated this plant shows that the operations of the Stearns Company are such that their plant becomes thereby almost as much of a factory as it is a saw mill. This is due to the fact that they manufacture so closely their low grade timber and, what would otherwise simply be waste to be thrown into a consumer.

This report also shows another remarkable fact, namely, that the amount of money expended in wages by this concern is almost twice as much as would have been expended on the same operations 25 years ago.

During 1914 The Stearns Salt & Lumber Company worked up into manufactured products 28,055,811 feet of logs and expended therefor in wages, at its mill plant alone, $434,844.66. Besides this there was expended for wages in lumbering operations at its camps in Kalkaska County, $180,434.66. The figures given here for labor expense are remarkable when considered in proportion to the number of feet of logs manufactured.

During the year 1914 the company shipped into Ludington 6,659 cars of logs at a freight expense of $63,508.04. The total number of cars shipped in and out of Ludington by this concern amounted to 11,275 cars and the total freight paid was $300,468.51. Therefore, we find in manufacturing 28,055,811 feet of logs, they expended in freight and wages alone $915,747.83. The amount of wages paid in proportion to the number of feet of logs manufactured results in a greater financial revenue for the city of Ludington and insures a more continuous supply of raw material, which makes for permanency of operations.



A HARD LESSON

For many people to learn is how to buy right, that is to obtain the greatest value for every dollar expended. This is more true of lumber than most commodities.

Price does not establish Value. You know from experience that some of the most expensive material you have ever bought was purchased at the cheapest price.

Our business has been built up on a "value" basis. We aim to give the fullest possible value for each and every one of your dollars.

THAT ORDER PLACED WITH US INSURES

Prompt, Courteous and Efficient Service.
The choicest lumber, best grades and smoothest mill work.
Your most critical customers pleased.
Satisfaction from start to finish, and the mental relief that this assures.

If your business needs a Spring Tonic, try a car of Fenderson Spruce, New Brunswick Shingles, and Lath,—if your trade is not as good as you'd like,—try the "Quality Policy" as a stimulator. One of the best advertising mediums you can employ.

Make that next car a Fenderson Car. You'll like it.

John Fenderson & Co.

Incorporated

Sales Office
27 Besse Place
Springfield, Mass.

MILLS AT
Sayabec, Que. **Cedar Hall, Que.**
Salmon Lake, Que. **St. Moise, Que.**
Jacquet River, N. B.

WE CARRY THE LARGEST AND BEST ASSORTMENT OF DRY SPRUCE IN CANADA

Individualism or Co-operation for Retailers

There seems to be an itching among a certain class of manufacturers and wholesalers for selling direct to the consumer and thus obtaining the profits that would otherwise go to the local retailer. They want to do away with what they deem is the cumbrous machinery of the retail lumber yard and the retail store and substitute the ideal method of trading direct; the old primitive way that prevailed before there was organized business. But while they are indulging in these ideal fancies and trying to figure out how they are going to do it they forget or don't have a comprehensive realization of what the real cost is of getting next to the consumer. They know very well that they are in all ways free to do it and it looks so simple and easy. I am reminded here of a story that I once heard told at one of our conventions that seems apropos in this case.

An old darky preacher took for his text, "Salvation is free," and immediately after his discourse ordered a collection. One of his parishioners took him to task for it after the service and said:

"See heah, pahson, you just done gone and preached salvation am free, and then you done gone ordered a collection right away. Ah wants you to 'splain dat."

"Well," says the parson, "hit am just like dis: You go down to de end of de street two blocks and you comes to de ribber. Now you can lay down and drink all you wants and hit am free, but if you wants dat water piped to your house, hits gwine to cost you sumpin for de pipin'. Salvation am free but hit's de pipin' what costs."

So likewise in the case of the manufacturer wanting to sell direct to the consumer. It is the "piping what costs" to get his goods to the consumer, whose benefit he seems so solicitous about. It looks mighty easy from his viewpoint to pipe his goods to a consumer, but the trouble is his piping is not of the right kind. It lacks the service quality which the local retailer is able to give. And this service quality means more than mere delivery. It means the assembling of a stock that comes from all over the country, giving the customer an opportunity to see and look over what he is going to buy and taking it in small or large amounts according to his needs. If he is lacking in money at the time, his credit serves him instead, and at the same time adds to the cost of the "pipin' " which the retailer perforce has to bear, and is a part of a service which the manufacturer cannot give.

This local service includes all that a retailer is to the home consumer and to the general community as well and constitutes the strong connection (or piping) which he has with the local trade, but the costs of it all are heavy and include the wear and tear of his daily life, as well as the use of his capital. This personal service is something which the manufacturer is absolutely unable to give, and therefore he can never with reason hope to eliminate the retailer, who is just as much a part of the business as he is and as essential. You can no more do without him than you can the carpenters, or the cooks that prepare the food that we eat. The sensible thing to do is for the two branches of the industry to get together and find out the causes for the friction and remove them. It is all "piffle" and childish to throw the blame on the other fellow when things don't go to suit us. And moreover it shows a weakness in ourselves whenever we do it.

A Confession of Weakness

Whenever I hear of a manufacturer or a wholesaler cutting loose from the regular channels of business in opening up a direct-to-the-consumer trade, it looks to me as an unfailing evidence that it is a confession of weakness on his part and an admission that he is unable to play the game as it is played in the regular way. There is something wrong with the business ability and moral character of a man who wants to be known as loyal to the retailer's interest and at the same time is soliciting the trade of the consumer. There is nothing meaner on God's earth than a hypocrite, and it is only found in the human species. When a man is a failure as a wholesaler through his inability to get trade and hold it, he does not lay the blame on himself or his methods. No, he cusses the retailers and blames them for not giving him their patronage, and forthwith begins to ingratiate himself with the consumers by telling them they are being robbed by their local dealers, and by giving him their trade he will keep them out of the poorhouse. He poses as a benefactor, and the guardian angel of the consumer in protecting him from the rapacious greed of the middleman. He promises everything: does as little as he can for his gullible patrons and is withal the biggest liar in the business world. The straight out and out mail order concerns are legitimate and regular of their kind, but the double-dealing manufacturer or wholesaler is a fraud in the regular business and a "delusion and a snare" to his patrons.

I am not merely giving expression to my feelings in telling what I think of these business mongrels but I'm telling what I know from actual experience and observation, and I want to say also that the retailer who patronizes these double-dealers for a promised advantage, is not only injuring those who are loyal to his interests, but he is also doing a part in the eliminating of himself as a retailer.

Not Enough of Co-operation

Not only the retail business, but the whole lumber industry is suffering to-day from too much individualism. Every man in the trade has gone on doing what seemed expedient in his own eyes, irrespective of what effect it might or would have on the other components of the business as a whole. To use a slang phrase, "No man has given a damn for the other fellow." The manufacturer has gone on running his own plant in the attitude of resentment against dictation as to the amount of his output, regardless of what effect it would have on the market. Scores of mills have been built that were not needed. But the individualistic spirit of men with credit and more or less capital impelled them to project themselves into the field of competition relying more on intangible possibilities than on the actual needs of the industry. The fallacy of this is being revealed to them now, and their cry now is, "What must we do to be saved" from our go-it-alone disposition; and as men do when in a blind-alley of danger, they are reaching out to touch each other for a mutuality of protection and endeavoring by collective effort to remedy the consequences of the past go-it-alone spirit. They are doing now what they should have done twenty years ago, but the individual spirit was too strong and proud then to co-operate for the purpose of restraining themselves.

Individualism has been strong, too, with the retailers. They are suffering also from the effects of it, but not in the same degree as the producers, because they began earlier to work together in associated effort for the protection of their interests, and the development of the association spirit as the result of this effort has led to the adoption of ideas and methods that have materially improved the retail business as a whole. Where individualism is more strongly marked now is in the relations between local dealers. It is more so in some localities than others. In these places the competitive feeling is stronger than good judgment and common sense, and perverted into a personal feeling of combativeness and the survival of the fittest. But everywhere this personal feeling against a competitor more or less prevails. Dealers work against each other instead of with each other for the creating and promotion of business. 'Tis true retail lumbermen are estopped by law from entering into a price combination, but there is no law that can prevent them from combining with each other to **create more business in their locality and co-operating to promote it.** In so doing each will be the gainer. This getting business at the expense of a competitor is also at the expense of the one getting it, for business obtained in this way is a two-edged proposition. It cuts both ways. In many places one-half of the dealer's time and thought are occupied in devising ways and means to down his competitor through cutting his prices and "knocking" his reputation. Whereas, if he would devote that time in stimulating people to build better houses and have better conveniences around their homes and in every way promoting the use of what he has to sell he would pay less attention to studying how cheap he could sell to beat the prices of the other yard.

Not a Paying Policy

This go-it-alone policy is probably gratifying to one's selfishness, but when carried out in a small town where business is not stimulated by co-operation it is not generally a paying proposition, for when one dealer manifests a hog-it-all disposition the other competitors combine to force him to pay for it by making him take the business at little or no profit. Not a dollar's worth more of business is created by such methods. I was talking with a dealer of the old school this summer and he made the remark: "I don't want anyone to dictate to me how I shall run my business." I have heard this same sentiment expressed many times by the same type of business men. They are so strongly individualistic they won't harmonize with anyone in business nor in anything else. In fact, they are hardly satisfied with themselves. Some of you probably have one of this type of competitor to deal with. You want to harmonize with him but he won't let you, and the more you try it the more suspicious he becomes as to your intentions. Now, the thing to do with such a character is to let him alone, and go to work on a policy to create and develop your own business on different lines from what he is doing.

Do not depend on selling bills by getting them away from him. But take the money you will save in this kind of competition and spend it in a systematic course of advertising, and direct in this way the thought and attention of the public mind to you and your business. Get the people to come to your office to see you and talk about what your specific advertising has suggested to them. Be prepared for this in being able to show them a plan for any kind of building they may want, and the complete cost of it. Remember above all things, that it is the building they want and have in mind

Lumbermen's and Railroad Contractors' Supplies

Cut No. 14.

FINE Worsted Long Stockings in Black, as cut No. 14. The ideal stocking for wearing with knickers or riding breeches.

Cut No. 5.

MACKINAW Jumpers, as cut No. 5, for lumbermen and sportsmen. This jumper is to take the place of the old rolled neck sweater and is very much more serviceable. It is light in weight, buttons close up to neck and has many advantages over both coat and sweater.

Cut No. 19.

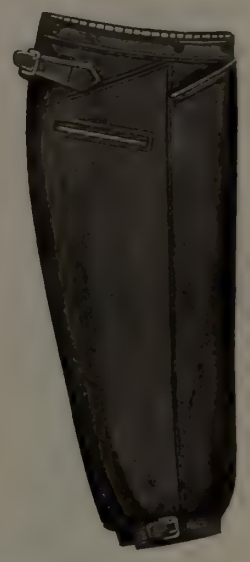
Cut No. 20.

Cut No. 21.

OUR Special Dogskin, Extra Large Pull-over Mitts, as cut No. 19. These we believe to be the biggest and best possible mitts to obtain for the lumbering trade. Our Home-made Hand-knit Wool Mitts as cut No. 20. Very generous sizes and perfectly proportioned. Can be used inside large fitting pull-overs to the very best advantage.

Special Large Horsehide Pull-over Lumbering Mitts as cut No. 21. Guaranteed water and fireproof.

Our Special Buckskin Mitt as cut No. 21. Indian tanned and cut. One of the very best values in the trade.



Cut No. 7.

Mackinaw Knickers

MEN'S Mackinaw, (Bird's Pure Wool) knickers as cut No. 7. Black shades only. Top and hip pockets. Strap or Wool cuff. Very convenient and comfortable wearing. Sizes 32 to 44.

Smart-Woods LIMITED

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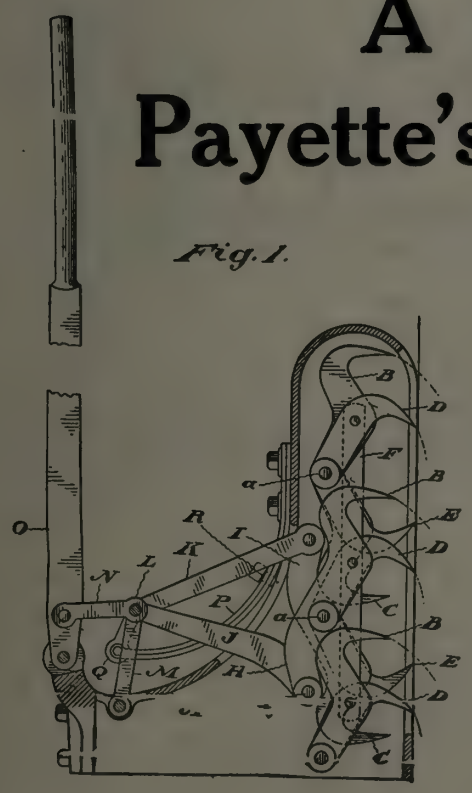
A Boon to Lumbermen
Payette's Famous Patent Mill Dogs
650 Sets already sold



BECAUSE

(1) They will dog with perfect ease and safety in any class of timber.
(2) Will dog just as easily, frozen maple or hardwoods of any description.
(3) Will dog the last board, just as easily as they dogged the first one.
(4) They do not tear the board or stock.
(5) Many other reasons, too numerous to mention here.

Write us for full particulars and booklet on same.

We also manufacture the following High-Grade Saw-Mill Machinery;—New Modern Saw-Mill Carriages, with either three or two head blocks; P. Payette's New Patent Saw-Mill Dog, for use in either winter or summer. P. Payette's Grip-Set Works; Steam Feed Valves, Steam Lifter and Loaders, Valves. Five different classes and styles of Edgers, for either light or heavy duty. Combined Gang-Circulars and Edgers, or Independent Gang Circulars.

Steam-Canters, Steam Lifters and Loaders, and a general line of saw-mill machinery. Detachable Chain-Sprockets, Castings of Gray-Iron, Semi-Cast Steel, and brass castings for general use.
Descriptive Booklet and prices mailed free upon request.

P. Payette & Company
Engineers and Machinists
Penetanguishene, Ontario

and its total cost more than they have of the details of the quantities and kind of materials. And if it is an inducement make the offer to contract to sell them the whole building complete for a stipulated amount. Depart from some of your old customs, if necessary, and adjust yourself to a service that will attract and please the trade. Make your office the public library for information concerning everything relating to building matters and the right use of everything you have in stock. If you desire people to take an interest in you, you must exercise a working interest in them, give freely of your service and don't be stingy about it. Someone at one of our conventions said this in his talk:

"To be happy, you must give; to be successful, you must take, and to be both happy and successful, you must give and take."

Your competitor of the old school would turn up his nose at this kind of a business doctrine, although he is perfectly willing to subscribe to the "taking" part of it, but he don't believe nor understand that in giving anything it will ever come back, and yet, there is nothing truer in all the laws of the universe. Somehow, this is the hardest thing to pound into the heads of the generality of business men: especially in the matter of advertising. It seems to most a waste of money to spend it in printers' ink and scatter it over an ocean of intangibility, and still there are abundant proofs that when done in the right way no greater returns can be shown for the money given out for the purpose. The law of compensation is more than generous in this case.

Team Work Would Help

By pursuing such a policy as outlined above you will build up a business of your own that the ordinary competition cannot take away from you. But how much more might be done if both you and your competitor would work together along the lines of this policy. If one can do much, two can do more in a combination of team work for any purpose. And then again, the whole town and farming community would be benefited also, and increase its radius of influence. This is the kind of combination that country town business men will have to enter into if they would have their towns develop into attractive centres of progress and living, and thus lessen the reasons for the younger element to go away to the large cities.

I may seem visionary to you when I say that I believe there is a great future for the country towns. The price of land in the older states is getting so high that at the rate it is increasing, the time is not far distant when it will become unprofitable to farm as it is being done at the present time. It will be cut up into smaller farms and worked intensively so that forty acres will be all the average man can take care of. This will mean a large increase in the farming population and a corresponding growth in the size and importance of the country towns. It means also an expansion in the use of building materials and diversity in their use. In view of all this there is likewise a great future for the building material dealer in these country towns and he must keep pace with this progress and fit and adjust himself to these economic changes that are surely coming in this country and which are foreseen by others than myself.

I was talking to a man the other day who is the owner of a number of farms. The rent he was getting from them did not yield him but little over 3 per cent. on the value of the land, and he had made up his mind to divide them up into smaller subdivisions and dispose of them in this way. Men accustomed to farming in the old countries could purchase forty acres and make a good living from them owing to their being trained in the knowledge of intensive cultivation. A number of men here in the city are making systematic efforts to place foreigners on small lots of land in this way, and so far have succeeded in placing over 1,200 of them in this state. This is going to make more business for the local lumbermen in those localities. This movement is bound to spread and is worthy the attention of the lumber industry in helping it along.

Bankers Are Interested

At a bankers' convention this summer I was surprised to see the interest they were taking in the developing of intensive farming and of the farmers' interests in general. I listened to some inspiring talks on this subject by country bankers who had passed their lives in small towns and knew what they were talking about, and it seemed as though the greater part of the conversation was given up to discussing the problem of how to promote the economic interests of the country communities. As one man said, "We are here to consider how we shall take interest with the farmer as well as from him."

We usually regard a country banker as a sort of a sponge absorbing everything and giving nothing out. And it struck me as something strange and significant to see a lot of these men seeking to co-operate in projects for advancing the economic and social interests of their respective localities. The business of a lumber dealer, insofar as it relates to the selling of building materials, is, in its nature, wholly constructive. The banker's business is to furnish means needed in such work and therefore he is vitally interested in the development of anything of this nature. If, therefore, the lumber dealers and the bankers of a town will unite in doing team-work along lines of constructive effort they will form a powerful combination that will produce results.

I believe it would be a helpful thing to both parties if the lumbermen and bankers in country towns would get together and consult on ways and means to carry out the ideas that are practical for action of this kind, and I am sure that much can be done that will be beneficial to both, to say nothing of the greater benefit it would be to their communities. A working union of this kind with the banker could also be made a means for assisting the lumberman in the better regulation of his credit business. It is the business of the banker to loan money, and the lumberman is not helping him any by his policy of loaning out money, in the form of material, without interest. Some arrangement could be made with the banker to carry these credits instead of their being carried on the ledger of the lumber dealer.

These suggestions, I believe, are not only practical, but they are practicable if both these interests are willing to co-operate together in spirit and intelligent application. There is great need for the toning down of the individualistic spirit in our country towns and getting it to co-operate for the larger interests of the whole.—C. H. Ketridge in the Mississippi Valley Lumberman.

Quebec Cullers' Report

The following comparative statement of timber, measured and culled to date, is furnished, under date of October 6th, by the Supervisor of Cullers' Office, Quebec, P.Q.:—

	1913. Cubic Feet	1914. Cubic Feet	1915. Cubic Feet
Waney White Pine	216,600	591,440	399,280
White Pine	7,560	.....	.....
Red Pine	960	1,040	.....
Oak	115,840	337,360	110,120
Elm	211,520	305,240	46,840
Ash	1,000	680	840
Birch and Maple	47,680	50,800	48,880

New Brunswick to Appoint a Provincial Forester

According to a bulletin issued by the Dominion Commission of Conservation, the Government of New Brunswick has announced that in the near future it will appoint a provincial forester and proceed with the survey of Crown timber lands. The Crown lands comprise an area of over 10,000 square miles, or approximately one-third the total area of the province. The province now derives an annual revenue of over half a million dollars from these lands. A careful stock-taking, together with a thorough and scientific investigation of the questions of reproduction and rate of growth, will be undertaken to determine the means necessary for the perpetuation of the forest and the revenues resulting therefrom.

A Practical Fire Prevention Move

Travellers in C. P. R. trains have lately noticed, with a great deal of interest, small notices hanging in all the smoking cars, which call their attention to the danger of causing forest fires by throwing their matches, cigarette ends, etc., out of the windows. This is a practical method of educating the public, and one which should be adopted by every Canadian railroad. The notice reads as follows:—"Forest Conservation and Precaution Against Fire—Travellers are respectfully requested to refrain from throwing lighted matches, cigarettes, cigars, or contents of pipes from cars, as destructive fires in the forest, on the prairie and elsewhere have frequently resulted from such practice."

An event of considerable importance to the pulp and paper trade of Canada was the recent opening of the Lake Superior Division of the Canadian Northern Railway. Canada now has its third transcontinental railway, for the Canadian Northern has continuous lines from tidewater at Chicoutimi, Que., to Vancouver, B. C. Pending the completion of the terminal scheme at Vancouver, the Great Northern terminals will be used. The opening of the Lake Superior Division will make available one of the finest pulpwood reserves on the continent. The railway itself owns in fee simple two and a half million acres of timber land along its right of way north of Lake Superior. This land stretches roughly from Sudbury, Ont., to Port Arthur, a distance of 500 miles. Most of the timber is spruce, and a very large proportion is of the pulpwood size. When conditions improve there is no doubt that some of the big water powers in Northern Ontario will be utilized for additional pulp and paper mills. In the meantime there is an enormous supply of pulpwood, the business in which the Canadian Northern Railway will foster.

DRIED FRUITS

PEOPLE are going to be put to it this season to get their requirements of dried fruits. Everything is scarce—what were not so to start the season have been made so by the extra demand put on them by reason of crop failures and embargoes at other sources of supply.

We quote :—

Comadre Figs (in Serons) - - - - -	6⅞
California 4 Crown Muscatels - - - -	9¼
" Seedless Raisins - - - -	9¼
" 80/90 Prunes 50 lbs. - - - -	7¼
" 70/80 " " " - - - -	7¾
" 60/70 " " " - - - -	8¼
" 50/60 " " " - - - -	8¾

Try Camp Blend Tea—Black 19½ Mixed 18½ Green 17½

H. P. ECKARDT & CO.

WHOLESALE GROCERS

Church St. & Esplanade, TORONTO

Jenckes Boilers

We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They-are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

The Jenckes Machine Co., Limited

Sherbrooke Montreal Cobalt So. Porcupine St. Catharines Toronto Vancouver Nelson

Miscellaneous News Notes of Interest to the Trade

Mr. R. H. Campbell, Director of Forestry, visited Victoria, B. C., recently and was the guest of honor at an informal dinner given by the Forest Club.

Robert Dargavel, of Dornoch, Ont., died recently at the age of 64 years. Mr. Dargavel has been engaged throughout his whole business life time in the manufacture and sale of lumber.

Premier Clark, of New Brunswick, will have a conference at an early date with representatives of the lumber industry of New Brunswick, with a view to discussing a number of matters of importance to operators upon Crown timber lands.

Canadian exports of forests products for August 1915 were valued at $5,846,897. In the two previous years the values were as follows: —1914, $4,256,635; 1913, $5,063,551. For the twelve months ending August the totals were as follows:—1915, $45,658,916; 1914, $42,593,099; 1913, $43,652,201.

The death occurred recently at St. Johns, Nfld., of Mr. John A. Potts, who was well known throughout the lumber trade of Nova Scotia. Mr. Potts was on the way to look after the lumber interests of the Royal Bank of Canada. For some years the late Mr. Potts had been connected with the Dalhousie Lumber Company, Dalhousie, N. B.

Mr. James E. Barnet, eldest son of Mr. Alexander Barnet, Renfrew, Ont., died on October 5th at his home in Renfrew. The late Mr. Barnet was 45 years of age and unmarried. He had been in failing health for some time. Mr. Barnet was a lumberman and had large interests both in the Ottawa Valley and in British Columbia. He took a great interest in athletics.

J. C. Purdy, a well known Nova Scotia lumberman, in a recent interview, stated that freights for winter shipments by liners were now quoted at 175 shillings, and some shipping men were declaring that during the winter they will reach 200 shillings. During the past season Mr. Purdy has loaded 18 vessels with lumber for Great Britain, and still has three cargoes to load.

George Gordon & Company, Limited, Cache Bay, Ont., report that they have placed contracts for machinery for their new mill. All the machinery will be purchased from the Waterous Engine Works Company, Limited, Brantford, Ont., with the exception of one carriage, one horizontal resaw and one edger, which are to be purchased from the Diamond Iron Works, Minneapolis, Minn.

A new idea in connection with the discovery of forest fires has been adopted in the woods of Northern Wisconsin, where a Hydro-aeroplane is being used for this purpose. The air man recently discovered a fire thirty miles away and was able to give its location and extent accurately. An additional advantage is that in this way the scene of a fire can be reached sometimes in a few minutes, whereas hours are usually necessary for the ordinary forest ranger to arrive on the scene.

Pulp manufacturers in Eastern Canada are having as much trouble as lumber manufacturers in securing tonnage for the shipment of their product abroad. The Chicoutimi Pulp and Paper Company, for instance, finding recently that tonnage was no longer available, purchased a ship for their own purposes. They had scarcely come into possession of the vessel however, before it was requisitioned by the Admiralty. Then they bought another and it met with a similar fate. Now the company is confronted with the problem of shipping 140,000 tons of pulp to Europe before the close of navigation.

Hon. L. J. Tweedie, Chatham, N. B., in a recent interview, expressed the opinion that the cut of lumber in New Brunswick during the present season will be greatly reduced. At the present time, he said, freight boats were difficult to secure and the rates they charged were very high. Most of the lumber merchants in the upper province had a good supply of lumber on hand at present. He thought the cut would be regulated largely by conditions and prices in the British market. If Liverpool prices continued on their present basis, and there was a plentiful supply of snow, it was likely that a normal quantity of logs would be taken out of the woods. Otherwise the cut was likely to be much smaller.

According to a statement issued by the Forest Branch of the Department of Lands of British Columbia, the annual cut of timber in British Columbia is 2,000,000,000 feet. There are 794 logging camps in the province, and 420 mills employing 60,000 men. The Forest Branch also states that there are 350,000,000,000 board feet of standing timber in British Columbia and that in the rest of Canada the stand amounts to 300,000,000,000 board feet. The lumber industry represents one half the industrial capital of British Columbia. The payroll of the industries is one-half the payroll of all British Columbia's industries combined. The annual production of the industry furnishes 37 per cent. of the annual production of wealth in British Columbia.

The timber returns for the month of August issued by direction of the Minister of Lands of B. C., show that the total output of sawlogs for the Province, as shown by the scaling returns, amounts to 64,257,966 feet board measure, in addition to 71,383 lineal feet of piles and poles, and 8,329 cords of railway ties, shingle bolts, fenceposts and cordwood. Of this total there were exported 13,984,874 feet of sawlogs, of which 13,302,413 feet sawlogs was from the Vancouver District; also 5,320 lineal feet of piles and poles, all of which were exported from the Island District. Timber sales recorded during the month cover an estimated total of 10,100,857 feet of sawlogs, 85,000 lineal feet of piles and poles, and 1,234 cords of pulpwood, cordwood, etc., the estimated revenue from this source amounting to $18,160.36.

Silver Spruce Greatly in Demand for Aeroplanes

Silver spruce which is used in the manufacture of aeroplanes has been the subject of much enquiry since the commencement of the war. We have published references to this matter in previous issues, chiefly reports from Mr. H. R. MacMillan, Special Canadian Timber Commissioner, now in Great Britain. In a further report to the Department of Trade & Commerce Mr. MacMillan writes as follows:—

"In a previous report attention was drawn to the market which the manufacture of aeroplanes for war service is providing for clear silver spruce. During the past two months both the demand and the price have increased. It is evident that as long as the war lasts, a large supply of clear silver spruce will be required to increase and maintain the aerial navies of the Allies. No other timber has been found suitable for aeroplane work, and the supplies must be drawn from the Pacific Coast.

"The waste in manufacture due to splitting the timber to produce absolutely straight-grained pieces without any defect, is so great that great quantities must be purchased.

"The difficulty in filling the requirements is leading to a reduction in the specifications for size. Buyers are now accepting three inches and up in thickness, six inches and up in width, eighteen feet and up in length. Timber affected by check should not be shipped. Care should be taken to see that the timber is actually spruce; at least one shipment has come forward from the United States containing a fair proportion of balsam, a timber quite unsuitable for aeroplanes.

"As clear silver spruce can be procured only in the Pacific and is essential to aeroplane construction, the aeroplane manufacturers must continue to buy, regardless of the freight rates. Thirty-five to forty pounds a standard is now being offered for August and September shipments of fifty standards or more.

"As soon as the war is over the price of this timber will drop at least to a point near the former level; it would therefore pay any one in a position to secure suitable spruce logs during this summer and autumn to do so, and take advantage of the present unnaturally high prices for the clear lumber.

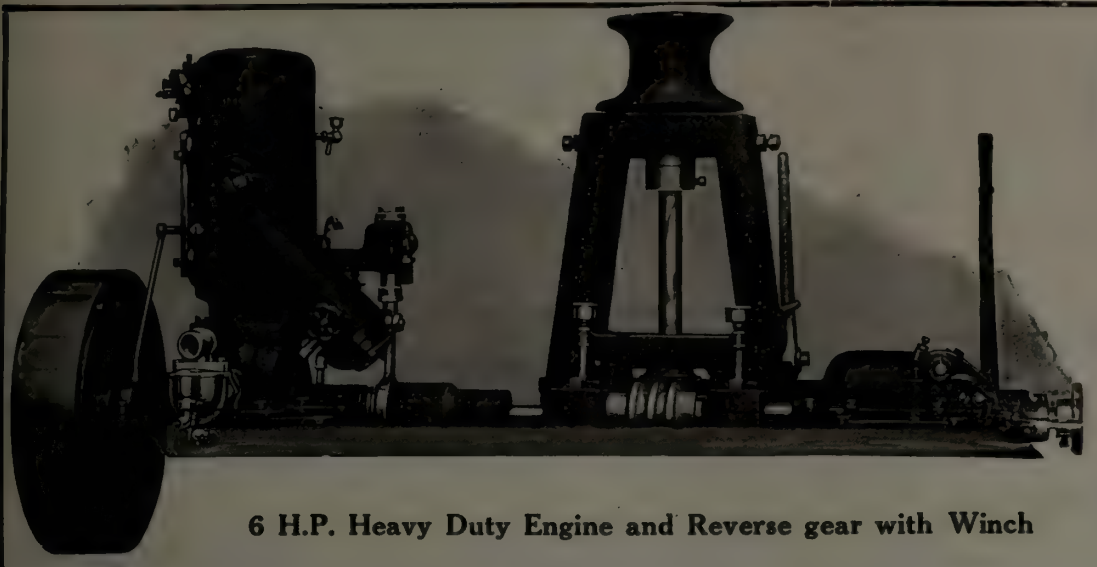
"Buyers have suggested that if spruce cannot be secured for shipment direct by liners from the Pacific Coast, the timber might be forwarded by rail to Montreal and shipped from there."

A list of firms desirous of buying this timber is on file in the Department of Trade and Commerce. (Refer to File No. A 1499.)

"The economic outlook for Canada to-day is excellent. Our large expenditures in Canada for war; the large expenditures of Great Britain and the Allies for supplies; the large orders for shells and munitions of war; the greatest crop by far in the history of Canada; all these things have materially modified and changed our situation.

"The Credit of Canada is vital for our present and our future. It must be preserved at all hazards. Therefore, the true policy for to-day is, that, since these other expenditures have taken the place of large government expenditures on public works, the government must go on only with necessary work.

"The slogan for all time in Canada must be—produce as much as this wonderful land can be made to produce with its great natural resources, its men and its capital."—Hon. W. T. White.



6 H.P. Heavy Duty Engine and Reverse gear with Winch

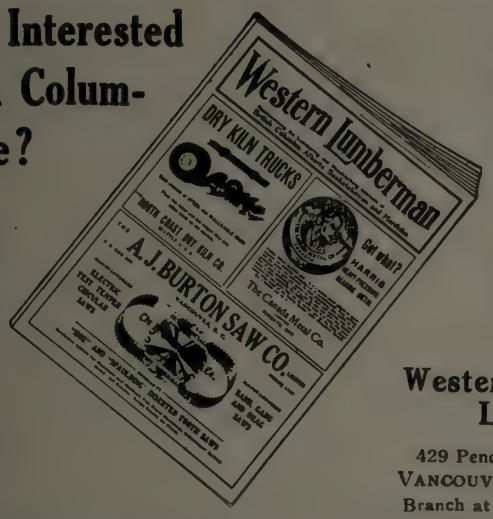
River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.

Are You Interested in British Columbia Trade?

The immensity of the Lumber Industry will within a few years make this Province the most important in the whole Dominion.



There is undoubtedly a big market for Mill Equipment of all kinds. Let us Demonstrate our Advertising service. We please others, we can please you.

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VANCOUVER, B. C.
Branch at Winnipeg

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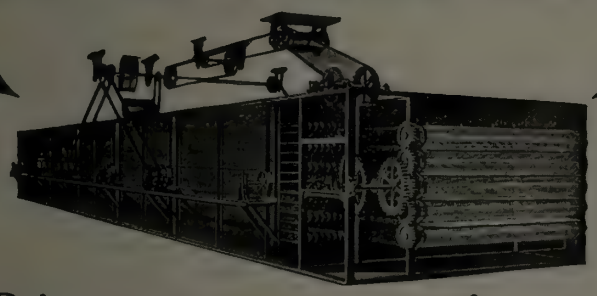

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A Safe Convenient Food

Caldwell's Molasses Meal is the safest most convenient food for camp horses. It contains 84 lbs. of Pure Cane Molasses in every 100 lbs. It is not a stimulant, but a scientifically manufactured food which contains digestive properties that a straight diet of cereals lacks.

Caldwell's Molasses Meal eliminates waste, is convenient to feed and keeps the horses healthy. It is made in Canada by Canadians and sells at a price that makes it a profitable investment for every owner of camp horses.

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Safety — Economy

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THE EAGLE LUMBER CO. Limited
WHOLESALE LUMBER
SANS-DIEU-RIEN
MONTREAL - Canada

Head Office at Montreal.

SPRUCE rough or dressed

1" No. 2 and Better Birch, 1914 cut
also Basswood, Hemlock and Pine

Saw Mills at MONT LAURIER.
Dressing Mills at ST. JEROME.

For Sale

Two Double Cylinder Hoisting Engines and Boilers, one with 7 x 12 and one 6½ x 8 Double Drum, with booms, cables and everything complete for loading logs. Used only two months, well kept and good as new.

Herman H. Hettler Lumber Co.
Midland, Ont.

LATH

Campbell, MacLaurin Lumber Co.
Limited
Board of Trade Building, MONTREAL

Dry Spruce and Birch

GOOD STOCKS PROMPT SHIPMENTS SATISFACTION

C. A. SPENCER, LIMITED
Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

The Hardwood Specialties Company, Pembroke, Ont., have started rebuilding their mill which was recently destroyed by fire.

The Ashloo Timber Company, Limited, has been incorporated with head office at Toronto, Ont., and capital stock of $200,000. Among the provisional incorporators are R. J. Law and F. H. Barlow.

The Canadian Society of Forest Engineers has secured an Ontario charter, without share capital, the object being to promote the interests of the forestry profession in Canada. The head office of the corporation is to be at Ottawa and the provisional directors are Dr. B. E. Fernow, R. H. Campbell, Ellwood Wilson, Clyde Leavitt, G. C. Piche, N. M. Ross, and H. R. MacMillan.

Several reports have recently appeared in print to the effect that definite arrangements were nearly completed for the commencement of operations upon the building of a pulp and paper mill in the Metagami River pulp limit recently purchased from the Ontario Government by the Chisholm's Corporation, Limited, Traders Bank Building, Toronto. Mr. Duncan Chisholm advises us that the Chisholm's Corporation is not connected with any paper or pulp mill project, but that he personally is interested in a syndicate which is contemplating a pulp and paper operation. At present, he states, nothing definite has been arranged and rumors to the contrary are premature and unauthorized.

Eastern Canada

C. G. Baird, Chipman, N. B., recently suffered a loss by fire at his lumber yard.

The Canadian Box & Shook Mills, Limited, Sherbrook, P. Q., have secured a charter.

Plans are being prepared for the erection of a pulp mill for P. H. Renaud at Lake Megantic, P. Q.

L. H. Martin, Bury, P. Q., whose sawmill was recently destroyed by fire, incurring a loss of $8,000, will rebuild.

The Guelph Patent Cask Company, Sherbrooke, P. Q., commenced lumbering operations in the Megantic Section early in October.

The Cape Breton Pulp Company, St. Ann's, C. B., have given the contract for rebuilding their plant which was recently destroyed by fire.

M. Charions' sash and door factory, 55 Burnett Street, Montreal, P. Q., was recently damaged by fire, the loss amounting to about $4,000. The fire started in the planing room.

Negotiations are under way for the sale of the property of the Timothy Lynch Company, Limited, Nelson, N. B., to Fraser Limited, Fredericton, N. B. The property includes the company's mills and limits on the Miramichi.

A considerable stock of cabinet work was destroyed by a fire which occurred recently on the premises of the G. H. Randall Company, Limited, cabinet makers, City Hall Avenue, Montreal. The damage to the building was small.

The sash and door factory owned by H. Chagnon and Company, 27 Burnett Street, Montreal, has been damaged by fire, which started in the engine room. Most of the damage was done in the drying room, but it was not of great extent.

A great deal of damage was caused at Pugwash, N. S., recently, by a severe gale which occurred at high tide. In addition to the destruction of many fishing boats, the water floated away large quantities of lumber. J. C. Purdy and C. H. Read had large quantities of lumber piled in the vicinity of the wharves waiting to be loaded, and this was all floated out.

During a heavy gale recently, two large rafts of logs belonging to D. D. Glasier & Son, which were being towed down the St. John River, broke loose. One raft consisted of 100,000 feet and the other of 300,000 feet. The tugs in charge of the logs were crossing Grand Bay at the time. The high wind continued and drove the logs down the river. There was danger for a time of their being carried out to sea, but it was believed that they would all be gathered in successfully.

Joseph Laurion, Eugene Poirier, and Bonaventure Desjardins were killed, and Joseph Leveille seriously injured in a fire which took place in the sash and door factory of Benoit and Sons, Amherst Street, Montreal, recently. The men were on the second and third floors, and were cut off from escape owing to the rapid spread of the flames. The fire was started, it is believed, by a spark from a planing machine due to friction. The factory, a three storey brick structure, was badly burned, although the roof and walls were not destroyed. The machinery was seriously damaged. The estimated loss is $10,-

000, not counting the machinery. Insurance was carried to the extent of $18,000. The factory will be repaired.

The Bathurst Lumber Company, Limited, Bathurst, N. B., report that the fire from which they recently suffered, destroyed about 15,000,000 feet of lumber. They have not as yet completed their inventory, however, and cannot state the amount absolutely. Fortunately, the fire did not in any way injure the company's large sawmills, their planing mill, their sidings, or their shipping facilities. They can therefore continue taking care of orders to some extent. The stock that was burned was dry lumber and they will feel its loss for some time to come, but they still have a fair quantity of dry lumber on hand from which to take care of at least a portion of the pressing orders they have recently booked for shipment.

Western Canada

T. Z. Smith, Matsqui, B. C., will build a factory for the manufacture of boxes.

J. E. Parrott, Saltcoats, Sask., has sold his lumber business to the Prince Rupert Lumber Company.

The shingle mill belonging to the Star Lumber Company, Revelstoke, B. C., was recently destroyed by fire. The loss amounted to $10,000.

Shipton and McIntosh's planing mill at Indian Head, Sask., was recently damaged by fire. The loss was covered by insurance and the company reported that there would be very little interruption to their business.

The Terry Logging Company, Limited, has been incorporated with head office at Vancouver, B. C., and capital stock of $10,000. The objects of the company are to carry on a general logging business and to manufacture and deal in lumber and shingles.

The East Kootenay Lumber Company have re-opened their mill at Loco, four miles from Cranbrook, B.C. They report that orders have been coming in rapidly from the prairies during the past two months, and their stock on hand has been greatly reduced.

The Capilano Lumber Company, on the Capilano River, B. C., recently suffered a serious loss by fire, which totally destroyed the mill and about 20,000 feet of lumber. The mill had been running at full capacity of late and a large quantity of lumber had been piled up to be flumed down to salt water.

Sealed tenders are being received by the Minister of Lands for British Columbia up to October 29th, for the purchase of License X253, to cut 4,124,000 feet of Douglas fir and cedar on an area adjoining S.T.L. 40530, Nelson Island, New Westminster District. Three years will be allowed for the removal of the timber.

The sawmill and other buildings of the British Canadian Lumber Corporation at New Westminster, B. C., have been sold by the receiver, Mr. R. W. Middleton, to Mr. Leonard Imboden, of New York, for one million dollars. The terms of the sale call for a payment of $750,000 by December 31, 1915, and the remaining $250,000 by December 31, 1916.

Timber berth No. 652, containing 644.52 acres, situated north of Port Moody and southwest of Coquitlam Lake, B.C., was recently sold by public auction to Mr. J. Childs, of the Pacific Shingle Company, for $13,078. This was only a few cents above the upset price. The timber is said to contain a large quantity of cedar and to be of very high grade.

An interesting indication of the improved conditions in Western Canada is the fact that the Taylor Lumber Company, of Kimberley, B. C., has sold its entire stock of dry lumber and will ship it to Prairie points at the rate of five cars a day, during the next month or six weeks. The company will probably make arrangements for cutting again next season as this sale will remove all timber in its yard.

The order for 300,000 grain doors, recently placed by the C. P. R. with mills in the Cranbrook district of British Columbia, have nearly been completed. The order required about 7,000,000 feet of lumber. The C. P. R. mill at Bull River and the Otis Staples Lumber Company's mill at Wycliffe, have finished their allotments of the order, and the East Kootenay Lumber Company of Jaffray has nearly completed its share.

The Western Timber Corporation, Limited, Kamloops, B. C., whose incorporation we reported in our issue of October 1st, has been organized for the purpose of acquiring standing timber in British Columbia. Mr. J. C. Shields, president of the corporation, states that it is already possessed of a number of large tracts of timber both in the interior and coast districts of British Columbia. It is proposed for the present that the company shall be a holding company, though dealing also in timberlands and licenses; but it is possible that it may develop into a manufacturing concern at a later date.

The Japanese Steamship Komagata Maru, which gained world-wide notoriety about fifteen months ago, when she came to British Columbia with several hundred Hindoos and was finally obliged to carry them back to India, called at Victoria, B. C., late in September on her way to Chemainus to take on a cargo of lumber for Australia.

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914-15 cut.

Merchantable 1 x 4 x 10/13
Merchantable 1 x 5 x 10/13
Merchantable 1 x 6 x 10/13
Merchantable 2 x 4 x 10/13
Merchantable 2 x 5 x 10/13
Merchantable 2 x 6 x 10/13
Merchantable 2 x 7 x 10/13
Merchantable 2 x 8 x 10/13
Merchantable 2 x 10 x 10/13

all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1" x 4" up x 8/13. Approximately 60 per cent. 12 and 13 ft.

First Quality and Clear Spruce

1 x 4 in. up x 6/13—'15 cut.

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13
3 in x 9 in x 10/13

3,000,000 pcs. Mill Run Pine Lath, 4' x 1⅜ x ⅜—'15 cut.
1,000,000 pcs. Mill Run Spruce Lath. 4' x 1⅜ x ⅜—'15 cut.
500,000 pcs. No. 2 & 3 W. Pine Lath, 4' x 1¼ x ⅜—'15 cut.

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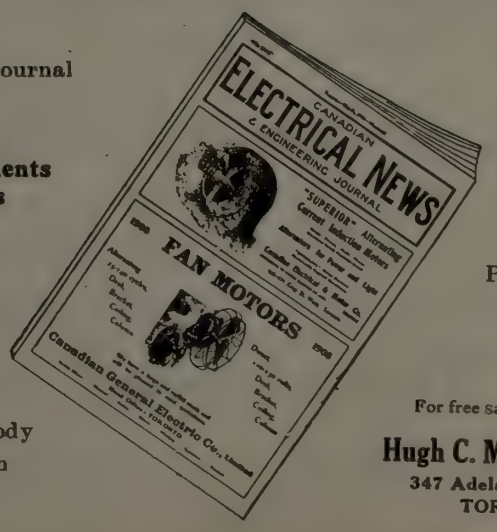

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"Wilson Bros." stamped on every piece of this flooring stands for Quality. Look for the name. Hardwood and Pine. **Interior Finish of All Kinds.** Also Hardwood Veneer Doors to detail. We are equipped to fill large or small orders on short notice. Write us for prices.

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For the reason that they cut cool and clean and fast, even when forced to the limit—and they hold their shape—show long life.

There is nothing superior to Aloxite for steel grinding—it is hard, sharp and of just the right degree of toughness and Aloxite Saw Gumming wheels are

The Right Wheels in the Right Place

Suppose you let Carborundum service help you to better grinding service.

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Cincinnati Grand Rapids Milwaukee Manchester, Eng. Dusseldorf, Ger.

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:		
1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better ..	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better ...	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing ..	27 00	29 00
1 x 8 common and dressing ..	27 00	29 00
1 x 10 common and dressing..	31 00	32 00
1 x 12 common and dressing..	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common.	25 00	26 00
1 x 12 inch box and common..		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00
Hemlock No. 1:		
1 x 4 and 5-in. x 9 to 16 ft. ...		17 00
1 x 6-in. x 9 to 16 ft.		20 00
1 x 8-in. x 9 to 16 ft.		21 00
1 x 10 and 12 in. x 9 to 16 ft.		22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.		19 00
1-in. No. 2, 6-ft. to 16-ft. ...		16 00
2 x 4 to 12, 10 and 16 ft.		19 00
2 x 4 to 12-in., 12 and 14 ft. ...		19 00
2 x 4 to 12-in., 18 ft.		22 00
2 x 4 to 12-in., 20 ft.		24 00
2 x 4 to 12-in., 22 ft.		25 00
2 x 4 to 12-in., 24 ft.		26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.		16 00
Clear in B. C. cedar, kiln dried		50 00
Douglas Fir:		
Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.		31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.		32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.		32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.		33 00
10x20, up to 32 ft.		33 50
6x18, 8x18, up to 32 ft.		34 00
6x20, 8x20, up to 32 ft.		35 00
Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.		
Fir flooring, edge grain		35 00
No. 1 and 2 cedar 1-in. Fir rough		38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough		40 00
1½-in. No. 1 4-ft. pine lath..		5 00
1½-in. No. 2 4-ft. lath		4 75
1½-in. 32-in. pine		2 65
1½-in. No. 1 4-ft. hemlock lath		4 00
1½-in. mill run hemlock lath		3 75
XX B. C. cedar shingles		2 25
XXX 6 butts to 2-in.		2 90
XXXX 6 to 23-16-in.		3 10
XXXXX		3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4..	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4..	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet...	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4..	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/.	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4..	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1¼ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:		
1-in. x 7-in. and up $52 00		54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up ..	40 00	42 00
Pine good strips:		
1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No.. 1 dressing sidings ..	30 00	33 00
Pine, No. 1 dressing strips ..	29 00	30 00
Pine, No. 1 dressing shorts ..	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips ..	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips ..	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips ..	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips ..	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft. ...	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in..	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards:		
1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12 ...	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16' ..	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1¼-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal..	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 30 to 35 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in. $54 00	
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide..	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft...	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed) ...	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft. ...	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft. ...	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft. ...	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft. ...	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft. ...	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

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Wholesale Selling Price

Uppers 4/4 ....$94 00	
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	48 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 54)

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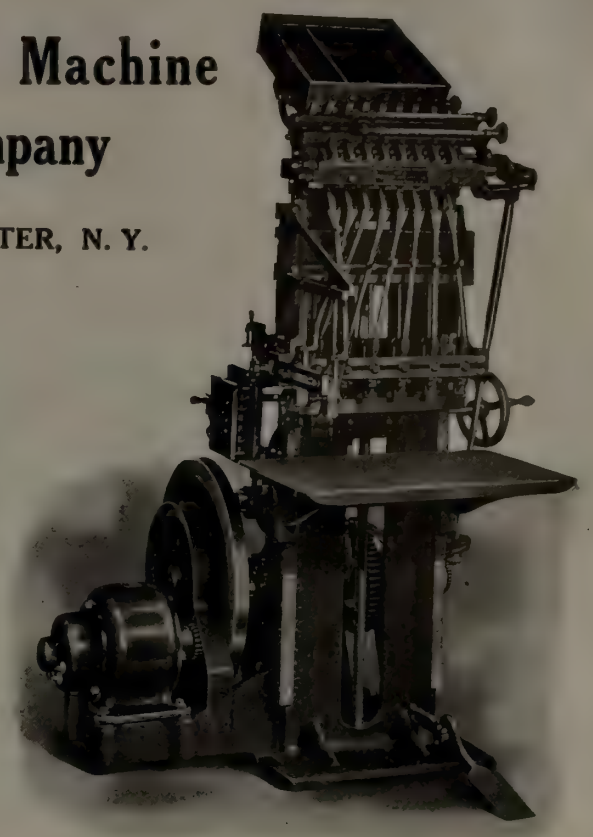

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GILLIES BROS., LTD., Braeside, Ont,
J. FENDERSON & SONS, Inc., Sayabec, P.Q.
EDDY & GLYNN, Sault Ste. Marie, Ont.

Ryther & Pringle Company, Carthage, N.Y.

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No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00

Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00

All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1⅝-in. spruce laths	4 10	4 20
1½-in. spruce laths	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 00	2 90
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 20	3 30
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear		3 28

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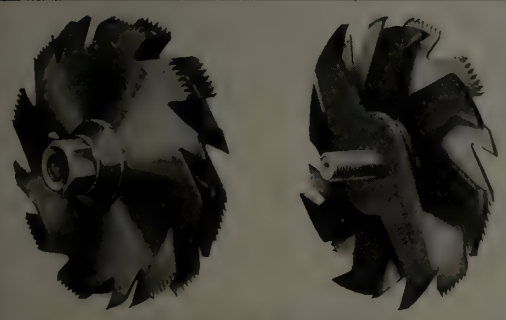

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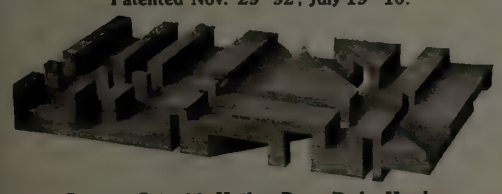

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Can. H. W. Johns-Manville Co., Ltd.
Garlock Packing Company
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

PLANING MILL EXHAUSTERS
Sturtevant Company, B. F.

PLANING MILL MACHINERY
Canadian Blower & Forge Company

POLES
Harris Tie & Timber Company
Pink & Company, Thos.

Continued on page 60)

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

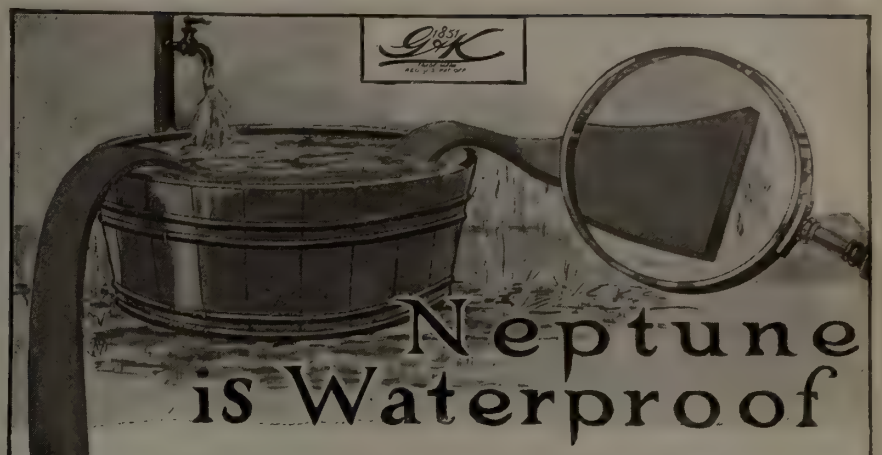
Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.

E. J. Macintyre, 1413 Great Northern Bldg., CHICAGO.



Neptune is Waterproof

In damp places where the ordinary kind of belting goes all to pieces, Neptune belting runs right along, day after day, every joint and every lap as tight as when first put on.

If you are interested in belting we'll send you samples of "Neptune" which you can soak in water. The laps will not loosen, nor, if double belting is used, will the belting come apart between the plies—this we guarantee.

Write for Neptune Book and copy of our new text book "Belting Manual." Both sent gratis upon request.

The Graton & Knight Mfg., Co.

Oak Leather Tanners and Belt Makers

Worcester, Mass., U. S. A.

Representatives in Canada:

The Canadian Fairbanks-Morse Co., Limited

St. John, Quebec, Montreal, Ottawa, Toronto, Hamilton, Vancouver, Victoria

Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

We make a Specialty of

Conveyor Chains

For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

Better Wearing Qualities

That's the open secret of "Asbestol" popularity with the men of the lumber camps. Up in the woods, where the big trees fall, you will find the woodsman hand in glove with "Asbestol," the proven hand protector.

ASBESTOL
REG. IN U.S. PAT. OFF.

EISENDRATH'S CELEBRATED HORSE HIDE

Dealers handling the "Asbestol" line of work gloves and mittens are assured the lion's share of this profitable trade. "Asbestol" converts do not backslide. They remain loyal rooters. Order from your wholesaler and write us today for handsome display rack—***free.***

Eisendrath Glove Company

2001 Elston Ave. Made in U.S.A. **CHICAGO, ILL.**

Canadian Made Locomotives

There is no need to go outside of the Canadian market in order to obtain the best logging locomotives. We have been specializing in this line for fifty years. You will find the design of our locomotives complete and the sturdy construction equal to every test of the severe service of logging operations.

Repair parts can always be had on the shortest notice.

This engine is 13½ ins. x 18 ins. and weighs 35 tons.

Grey Iron Castings—any size or shape—ordinary or intricate—made promptly. New foundry, splendidly equipped. We would be pleased to quote on castings—singly or by contract. We also make drop forgings of all descriptions.

MAY WE SEND YOU SPECIFICATIONS?

Canadian Locomotive Company, Limited, Kingston, Ont.

Taylor and Arnold Ltd., Sales Agent, Montreal and Winnipeg

J. J. TURNER & SONS

PETERBOROUGH, ONT.

Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

DETACHABLE

Lumber Trucks

For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East **TORONTO**

LOGGING LOCOMOTIVES

Best results are obtained from a locomotive only when designed and built to meet special service requirements.

Our standard logging locomotives were designed after a careful study of the conditions under which they must operate.

Every piece of material entering into their construction must undergo a thorough test and conform to the same specifications required for the largest locomotives. Only the best materials are used, insuring long life and satisfactory results.

Write us when you want a locomotive.

MONTREAL LOCOMOTIVE WORKS, LIMITED,

DOMINION EXPRESS BUILDING, **MONTREAL, CANADA.**

CLIMAX Improved Geared LOCOMOTIVES FOR WOOD AND IRON RAILS

A 62-ton Climax Locomotive Designed Especially for Heavy Logging Work.

Climax Locomotives are successfully operated on steep grades and sharp curves. Any weight or gauge. Locomotives in stock for immediate shipment. **Get Catalog "H."**

CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.
VANCOUVER MACHINERY DEPOT, LTD., VANCOUVER, B.C.

Do You Want a Salesman?

¶ Every live lumber salesman in Canada reads the Canada Lumberman and Woodworker.

¶ You can get the man you want through a small advertisement in the "Wanted and For Sale" department of this paper.

Canada Lumberman & Woodworker

Toronto, Ontario
Montreal Office, 119 Board of Trade Bldg.

PRESSES
Boving Hydraulic & Engineering Co.
Perrin & Company, W. R.

PULLEYS & SHAFTING
Boving Hydraulic & Engineering Co.
Dodge Mfg. Company, Limited
Waterous Engine Works Company

PULP MILL MACHINERY
Boving Hydraulic & Engineering Co.

PUMPS
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

ROOFING
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company
Tessier, Alphonse

SAWS
Atkins & Company, E. C.
Disston & Sons, Henry
Hoe & Company, R.
Radcliff Saw Mfg. Company
Shurly-Dietrich Company
Simonds Canada Saw Company

SAW SHARPENERS
Rogers & Company, Samuel C.

SAW MILL MACHINERY
Berlin Machine Works
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company

SHINGLES
Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SNOW PLOWS
Bateman-Wilkinson Company

SOUTHERN PINE
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Cameron & Company
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Garrett Lumber Company, T. H.
Gates Lumber Company
Hobart & Company
Mason, Gordon & Company
Southern Lumber Company
Stout Lumber Company
Valley Lumber Company
Wilson Lumber Company
Wisconsin & Arkansas Lumber Co.
Wuichet, Louis

SPRINKLER SYSTEMS
Keiths Limited

SPRUCE
Auger & Son
Bartram Bros.
Blair & Rolland
Bourgouin, H.
Brown Corporation
Cameron & Company
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL CHAIN
Canadian Link-Belt Company
McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

SNOW PLOWS
Pink Company, Thos.

STOVES
Canada Stove & Furniture Company
Enterprise Foundry Company

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

TIMBER BROKERS
Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS
Lauderburn, D. E.
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TRANSMISSION MACHINERY
Canadian Link-Belt Company

TUGS
West & Peachey

VENEERS
Hoffman Brothers Company
Webster & Bro., James

VENEER MACHINERY
Coe Manufacturing Company
Perrin, William R.
Philadelphia Textile Machinery Co.

VETERINARY REMEDIES
Fleming Bros.

WATER WHEELS
Boving Hydraulic & Engineering Co.

WOODWORKING MACHINERY
American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Long Manufacturing Company, E.
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

Tillson's Rolled Oats
Rainbow Flour—Top Patent Manitoba.
Goldie's Star—Famous Blended Flour.
Lily Flour—For Pies and Pastry.
Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

GUARANTEED ABSOLUTELY PURE

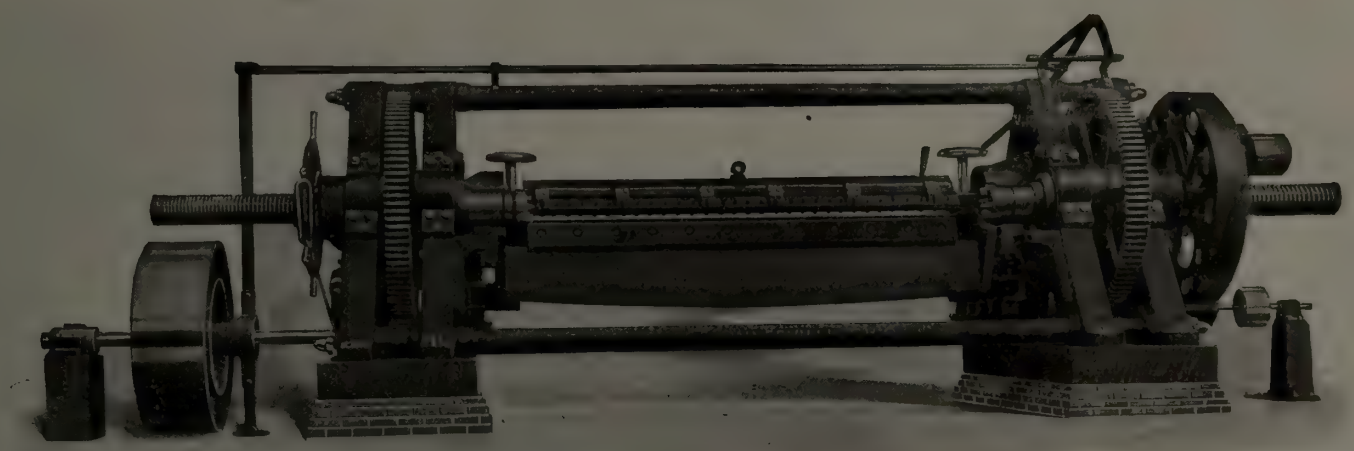
Canadian Cereal and Flour Mills Co., Ltd.
TORONTO - - - - - CANADA

Coe Veneer Machinery

The Standard of the World for Sixty-Four Years

The Coe Rotary Veneer Cutter

Style "A" Extra Heavy Pattern



Front View

Made for any length of knife up to 120 inches; diameter of swing, 68 inches; diameter of spindle, 6 to 8 inches. weight is proportionate to length of knife.

THE chief things required of any machine are ability to stand severe and continued use and ability to do its work in the manner claimed by its makers.

From the very first the Coe policy has been to design the most able Veneer machinery that expert knowledge could conceive, and experience suggest, and to make the Coe Veneer machines the best that selected material and skilful workmanship can produce.

We make the largest line of Veneer machines in the world and are always ready to answer questions about Coe machines. When an inquiry comes to us, we lay bare all the facts in question, for this is one of the means whereby the good points of the Coe Veneer Machines become known. Don't hesitate therefore, to ask us questions regarding Veneer Machines for Cutting, Slicing, Clipping, Wringing, Sawing, Drying or Stamping, or producing Veneer from any kind of lumber.

Judged by standards that go to make the best Veneer machinery, Coe Veneer Machines represent the best types made to-day—in capacity, resistance to wear and tear, and in excellence of product.

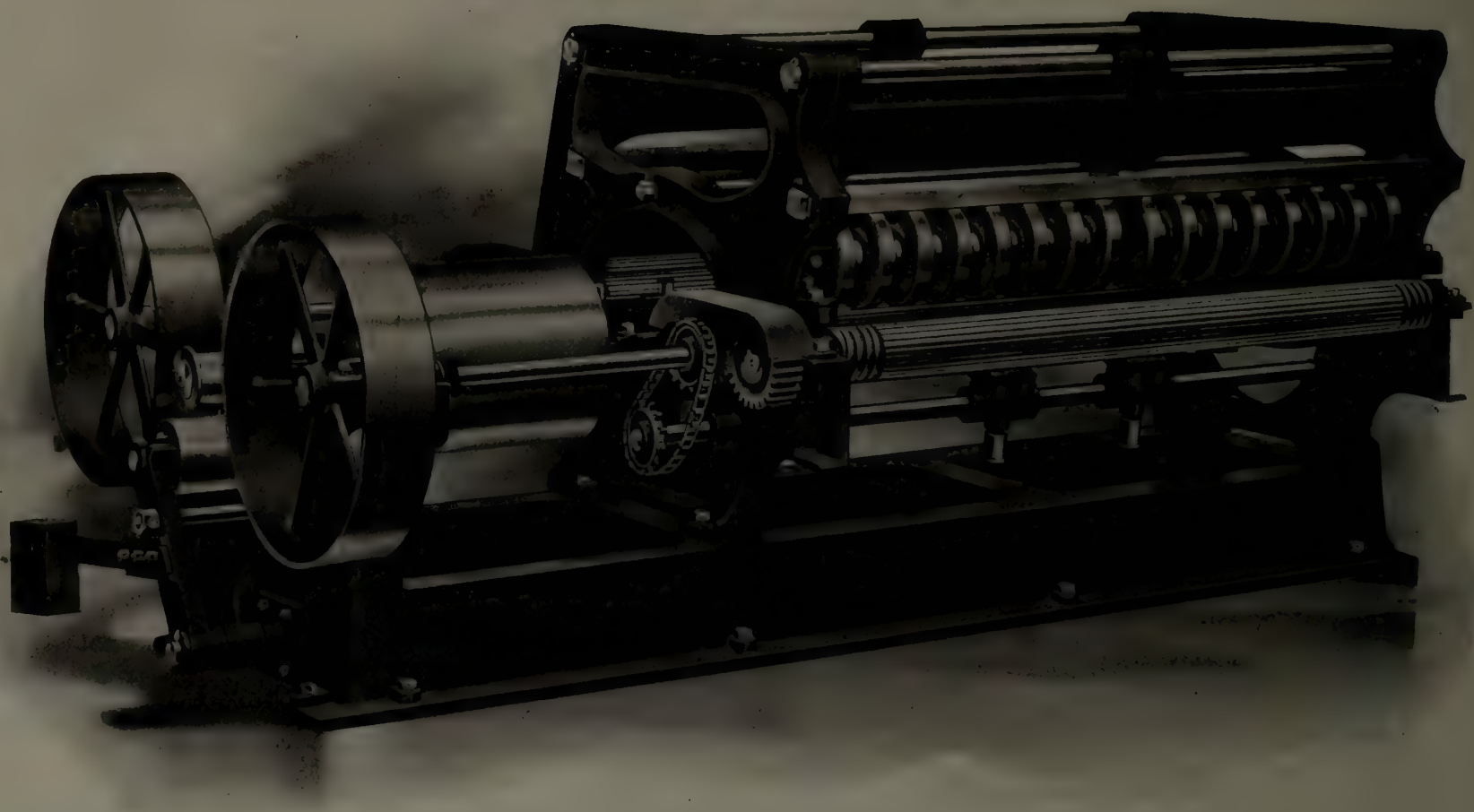
We are ready to plan and equip a mill complete for any capacity and we can furnish a full line of machines or any single one needed and make practically immediate delivery.

The Coe Manufacturing Company
PAINESVILLE, OHIO. U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer mill equipment in the world.

Heavy Duty Edger



These sturdy heavy duty edgers are built in sizes of 48 inch, 54 inch, 60 inch, 66 inch, 72 inch and 84 inch.

A feature in the construction of these machines is the casting of the base in one piece. This makes the machine self-contained and always in alignment.

We will be pleased to send you bulletin describing these edgers and giving their specifications.

The E. Long Manufacturing Company, Limited

Orillia - Ontario

AGENCIES:

MONTREAL—Williams & Wilson, Ltd.
WINNIPEG—Stuart Machinery Co. Ltd.
EDMONTON & CALGARY—Gorman Clancey & Grindley, Ltd.
VANCOUVER—Robt Hamilton & Co.

WATEROUS BIG CHAMPION EDGERS

Edge Those Heavy Cants With Speed and Accuracy

Waterous Big Champion Edgers are built to handle cants up to 8 in. —*and they will.*

They carry 26-in. saws, have saw collars 7¼ in. and mandrels 4⅞ in. in diameter. The rest of the machine is built in proportion.

The saw guides have two sets of plugs, to hold the saw close to the collar and again close to the rim. The saws cannot wobble in the cut. Guides are held on iron levers, to move quickly and easily and without cramping the saws.

Every part of these edgers is built for business. Bearings are large and water-cooled. Feed rolls fluted to grip the cants firmly but without injury. The feed is powerful and can be stopped, started or reversed at will.

You can send your heaviest cants through this machine without fear of injury and with the assurance that they will come out edged to exact size and true from end to end.

Built with edger opening of 48 in. to 96 in. Also as a Combination Machine with stripping section 18½ in. wide.. Our new catalogue No. 1011 on request.

Waterous Engine Works Co. Limited

BRANTFORD, CANADA

H. B. Gilmour, Vancouver, B.C.

Branch— Winnipeg, Man.

"FROST KING" METAL

$5,000,000.00
worth of mixed metal sold annually.

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. **Price 30c per lb., Fort William and East; West of Fort William 35c per lb., delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.**

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, 40c per lb.; West of Fort William, 45c, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

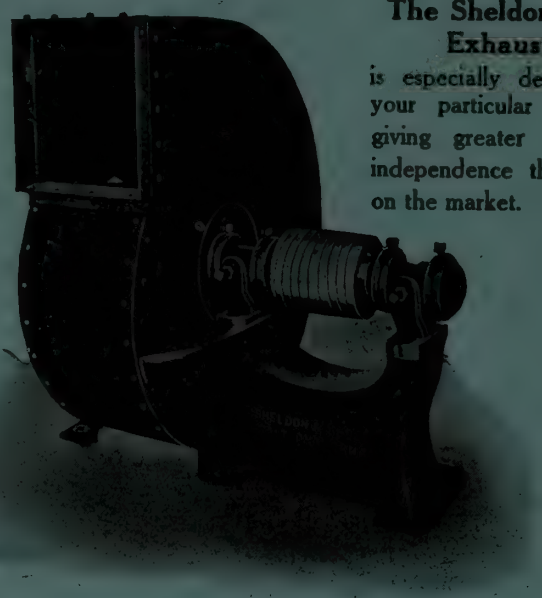
HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

Planing Mill Improvements

Every Manufacturer in the Lumber Industry realizes that to be "up-to-date" their Factory should be installed with **Shaving Exhaust Fans.**



The Sheldon Shaving Exhaust Fan

is especially designed to suit your particular requirements, giving greater efficiency and independence than any other on the market.

See our New Catalogue

Sheldons Limited - Galt, Ontario

Toronto Office, 609 Kent Building

AGENTS:

Messrs. Ross & Greig, 412 St. James St. Montreal, Que. Messrs. Walker's Limited, 259-261 Stanley St. Winnipeg, Man.

Messrs. Gorman, Clancey & Grindley, Ltd., Calgary and Edmonton, Alta.

Messrs. Robt. Hamilton & Co. Ltd., Bank of Ottawa Bldg., Vancouver, B.C.

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co.
Limited

General Mill Supplies MONTREAL

Clean Comfortable Bunks

If a Lumber Jack is to work at his best he must be content with his job and satisfied with the conditions under which he has to live.

THE ALASKA DOUBLE DECK BUNKS

will largely contribute to the comfort and contentment of your men.

Write us for prices.

The Alaska Feather & Down Co., Limited, Montreal

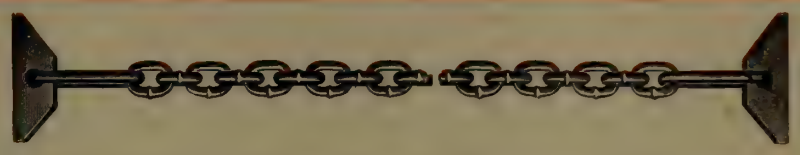
Vol. 35 Toronto, November 1, 1915 No. 21

Canada Lumberman & Wood Worker

WATER WHEELS GOVERNORS, PUMPS

Highest quality

Boving Hydraulic & Engineering Co.
LINDSAY, ONT. Limited



Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.

YOU CAN SAVE 15 to 50% POWER COST

in your exhaust systems for conveying and removing Shavings, Sawdust, Bark, etc., by using

Canadian Slow Speed Mill Exhausters

Facts are facts. Ask the users—and there are hundreds of them—what they think of the investment. Then you will use a "Canadian" on your next job.

Canadian Blower and Forge Co., Limited
BERLIN, ONTARIO
St John Montreal Toronto Winnipeg Vancouver

Blast Wheel for stringy material.

ASBESTOS

We manufacture practically every article that can be made of Asbestos—including

Asbestos { Packings, Boiler Gaskets, Pipe and Boiler Coverings

Turner Brothers Canada, Limited
MONTREAL

Did You Know

that we are making all kinds of Steam and Power Pumps, Centrifugal Pumps, Condensers and Vacuum Pumps?

The Smart-Turner Machine Company, Limited
HAMILTON, CANADA

Keeps a tally on all your lumber

Accurate Lumber Measuring

Depending upon humanity to measure up thousands of feet of lumber is a most uncertain practice. Put a Morrison Lumber Measuring Register on every machine in your mill and you will always have an accurate count of the lineal or board feet of lumber passing through each machine. *Write us for particulars.*

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide St., West, TORONTO

Promotion of Export Trade

"Leather like gold has no substitute."

A Reason — Simple but Sound

From time to time you are puzzled to know why you do not derive a full return from your efforts to secure ample power for your machinery. Where is the vent-hole through which your power escapes?

Look to your belting. You are creating your power all right but you are allowing it to leak in transmission. Can you expect an ordinary, common leather belt to be efficient, pliable, tenacious, friction-reducing when it has never been prepared to stand the damp atmostphere of green lumber or the effects of steam and oil?

"AMPHIBIA" Belting is no common, ordinary leather. It is prepared from selected hides, oak-tanned and waterproofed by a secret process. Its flexibility will surprise you. It is absolutely impervious to oil.

Try a sample run.

"AMPHIBIA"

The Flexible Waterproof Belt

"AMPHIBIA"

Really Grips The Pulley

Sadler & Haworth

TORONTO	WINNIPEG	MONTREAL	VANCOUVER	ST. JOHN
38 Wellington St. E.	Galt Building	511 William St.	107-111 Water St.	149 Prince William St.

To insure satisfaction state where belt is to run.

Red and White Pine Lumber

Red and White Pine Lumber

The Fire Did Not Destroy Our Small Mill or Planing Mill

WE HAVE A LARGE STOCK

OF

Red and White Pine Lumber

Dimension Timber, Deals, Etc.

In all Sizes and Grades

Dressing Done on Short Notice

SEND US YOUR INQUIRIES

Geo. Gordon & Company

CACHE BAY, ONTARIO Limited

We Have It If Its Lumber

Our shipping facilities are excellent by either rail or water.

Phone, wire or write us for prices and stock lists.

The McLennan Lumber Company, Limited

Montreal

The following stock is offered for immediate shipment:

100,000 ft.	1 x 12	-	6/16	No. 1	Mill Cull	White Pine
82,000 "	1 x 10	-	6/16	"	"	"
25,000 "	1 x 6	-	6/16	"	"	"
80,000 "	1 x 5 & up		6/16	"	"	"

We Can Give You Good Prices.

The Long Lumber Company

HAMILTON, ONT.

Something To "Crow" About

Hocken's Hemlock

When selling a customer it is comforting to feel that you are offering stock that you can conscientiously "Crow About"—such stock is Hocken's Hemlock. Get our prices.

Hocken Lumber Company, Limited

Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

Mason, Gordon & Co.

LUMBER

For Shell Boxes

Car and Cargo Lots Only

Douglas Fir
Yellow Pine
Hemlock
Spruce
Pine
Oak

in

Every Grade and Every Size

For Portable Houses

Export Lumber

Write, Wire or Phone for Prices

Montreal, Que. Vancouver, B. C.

Bartram Brothers

Cable Address, "Bartram"
Code, ABC 5th edition.

Ottawa, Canada **Limited**

Some of our stock on hand unsold. November 1, 1915

Devon, Ont. C. P. Ry.

NORWAY C. & C. F.

	Feet
1 x 4 and up x 10-16	7,852

NORWAY MILL RUN

1 x 4/5 x 10-16	1,465,603
1 x 6 x 10-16	418,768
1 x 7 x 10-16	130,976
1 x 8 x 10-16	46,416
1 x 9/11 x 10-16	27,995
1¼ x 4/6 x 10-16	101,000
1¼ x 7 and up x 10-16	214,190
2 x 4 x 10-16	118,052
2 x 6 x 10-16	141,375
2 x 8 x 10-16	240,865
2 x 10 x 10-16	58,119
3 x 4 and up x 10-16	357,291

NORWAY CULLS

1 x 4 and up x 6-16 No. 1 and 2	803,190
1 x 4 and up x 6-16 No. 1	350,000
1 x 4 and up x 6-16 No. 2	314,798
3 x 4 and up x 6-16 No. 1	210,764

WHITE PINE GOOD

1 x 4 and up x 6-9	1,600
1 x 4 and up x 10-16	10,067

WHITE PINE MILL RUN

1 x 4/5 x 10-16	123,460
1 x 6 x 10-16	16,100
1 x 7 x 10-16	60,585
1 x 8 x 10-16	15,969
1 x 9/11 x 10-16	20,100
1 x 10 x 10-16	2,550
1 x 12 x 10-16	9,912

Devon, Ont. (Continued)

WHITE PINE MILL RUN

	Feet
1¼ x 4/6 x 10-16	40,000
1¼ x 7 and up x 10-16	68,000
1¼ x 4 and up x 10-14	100,000
1½ x 4 and up x 10-14	200,000
2 x 4 and up x 10-16	4,311
3 x 4 and up x 10-16	109,696

WHITE PINE CULLS

1 x 4 and up 6-16 No. 2	120,160
2 x 4 and up x 6-16 No. 1	5,537
3 x 4 and up x 6-16 No. 1	54,221
3 x 4 and up x 6-16 No. 2	8,516

MILL RUN LATH

1½—32-in. White Pine	188,800
1½—32-in. Norway	655,650

Barachois, Que. I. C. R. or Boat

SPRUCE MILL RUN

1 x 4 x 10-16	199,197
1 x 5 x 10-16	354,226
1 x 6 x 10-16	387,930

SPRUCE CULLS

3 x 4 and up x 6-16	260,000

Montreal, Que. Basin No. 3

SPRUCE CULLS

1 x 4 and up x 6-16	137,079
Largely 6 and 8 in.	

We have large stocks of 3" spruce deals, scantlings, planks and boards for export.

"Specialists in Quick Shipments"

EXPORTERS TO U. K. AND EUROPE

The EAGLE LUMBER CO. Limited
WHOLESALE LUMBER
SANS·DIEU·RIEN
MONTRÉAL · Canada

Basswood
Spruce
Birch

Stock at our Mont Laurier Mill

2 x 3 in.—10/13 ft.	Spruce	200,000 ft.
2 x 4 in.—10/13 ft.	Spruce	300,000 ft.
3 x 3 in.—10/13 ft.	Spruce	100,000 ft.
3 x 4 in.—10/13 ft.	Spruce	100,000 ft.
2 x 5 in.	Spruce	160,000 ft.
2 x 6 in.	Spruce	80,000 ft.
2 x 7 in.	Spruce	90,000 ft.
2 x 8 in.	Spruce	50,000 ft.
2 x 9 in.	Spruce	160,000 ft.
2 x 10 in.	Spruce	30,000 ft.
1¼ x 4 in./up	Spruce	100,000 ft.
1 x 4 in./8 in.—10/13 ft.	Spruce	1,500,000 ft.
1½ in. x 4 in./up	Spruce	100,000 ft.
1 in., 1¼ in., 1½ in., 2 in., 3 in. and 4 in. Birch		200,000 ft.
1 in.	Ash	50,000 ft.
1 in.	Elm	20,000 ft.

Cedar Posts and Poles, Railway Ties.
Lath and Shingles.
Common Spruce for boxes and crating, all sizes.

Sash Doors and Interior Trim

Our dressing mill in St. Jerome is one of the most complete of its kind in Canada.

The Eagle Lumber
Company, Limited
Montreal

The EAGLE LUMBER CO. Limited
WHOLESALE LUMBER
SANS·DIEU·RIEN
MONTRÉAL · Canada

The Canadian White Cedar Shingle Association

Successors to

The North Shore Shingle Association

This Association is comprised of the following Cedar Mills:

Price Brothers & Co., Ltd.	Quebec
The Shives Lumber Co., Ltd.	Campbellton, N. B.
The Richards Mfg. Co., Ltd.	"
B. A. Mowat	"
Edwards & McLean	Bonaventure, Que.
The Forest Reserve Pulp & Paper Co., Ltd.	Gaspe, Que.
The Restigouche Lumber Co., Ltd.	Dalhousie Jct., N. B.
The Dalhousie Lumber Co.	Dalhousie, N. B.
The Continental Lumber Co.	Charlo, N. B.
The Bathurst Lumber Co.	Bathurst, N. B.
The Miramichi Lumber Co.	Chatham, N. B.
Fraser Limited	Fredericton, N. B.

Standard Grading Rules at all the mills assure uniform grading. We can now furnish dry stock in all grades for prompt shipment. Delivered prices at all points West of Campbellton, N. B.

For quotations address:

F. G. WHEATON, Amherst, N.S.

Canadian Sales Agent

Special: To reduce stocks we are quoting special prices on

Clear Walls Specials Extra No. 1s.

These grades are bone dry and can be shipped at once.

Let Us Be Your Warehouse

Hints to the Retailer

Quick turnovers mean sure profits.

Don't load up with large stock.

Buy often and sell often, and your stock will be always up to date and you will save tying up your capital, your depreciation will be nil.

Make us do your ware-housing, we are able and willing to do it.

Our New Ware-House

contains

5 X Panel Clear Fir Doors
2 Panel Clear Klimax Doors
Oak Front Doors
Clear Pine Stave Verandah Columns
Oak and Birch Stair Treads and Newels
Beaver Board
Flat grain ½" V Sheathing B.C. Fir
Hardwood Floorings
Basswood, Y. Pine and Oak Mouldings
Beaver Brand Roofing, 1-2-3 pl.
Beaver Brand Sulphite Building Paper
Edge grain ⅞" B.C. Fir Flooring

We give dealers a special discount and protect them on price. Our lines are complete, and we put you in the position of being able to give your customers efficient service.

PROMPT SHIPMENTS ON SHORT NOTICE A SPECIALTY

The McAuliffe Davis Lumber Co.

OTTAWA, CANADA Limited

Rough and dressed Lumber, dimension Timber and Factory work.
Also manufacturers of:—Boxes and Portable Houses.

Write for our prices and timber list.

The Ottawa Plant

¶ The Ottawa Plant is the most modern woodworking plant on this continent. It is equipped with the best machinery for the manufacture of Doors, Colums, Sash, Hardwood Flooring, Interior Trim, Etc.

¶ A large supply of high grade and well seasoned lumber is always maintained thus ensuring prompt shipment on all orders.

¶ We sell everything in Lumber.

Prices and particulars cheerfully furnished

W. C. Edwards & Co., Ltd.

Ottawa — Ontario

Quebec and Ontario SPRUCE

We are in a position to supply Merchantable Spruce in all thicknesses from 5/8" to 3 inch in standard widths.

Canadian Hardwoods

Specializing in

LAURENTIAN RED BIRCH

sawn for export at our mills in the Laurentians; can contract for cuts to be sawn to order. Also offer 1", 1 1/4", 1 1/2", 2" 2 1/2" and 3" dry stock.

Will be glad to quote on your requirements in

Maple **Basswood**
Beech **Ash and Elm**

C. A. SPENCER, LIMITED
Lumber Merchants

Eastern Townships Bank Bldg., MONTREAL, Que.

OPERATING

Spencer Lumber Co.—Mills at Rockway Valley and Arundel, Que.

Machinery and Timber For Sale

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the Town of Parry Sound, Ont.; and other Lumber Equipment, including boom chains, plows, sleighs, etc.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Automatic Machine for circular saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Wood Machine for 16-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

Also, contents of machine shop, containing Planer, Drill, Lathe and Machinery, with tools necessary for repair work.

All of the above open for inspection at Parry Sound.

The

Parry Sound Lumber Co.

Limited

26 Ernest Avenue, TORONTO, CANADA

Don't Take Our Word For It

Find out for yourself just exactly what

ARKANSAS SOFT PINE

finish really is.

(Unless you are one of the hundreds of alert dealers already acquainted with it.)

Let us send you our two samples—flat and edge grain.

They are 3½" by 16" S4S, that's all.

Get a "Close-up View" of the **Aristocrat of all Pines.**

Fill out the coupon—a pencil will do—then mail it.

Quotations on straight or mixed cars direct, from any of the following:

Arkansas Lumber Company,	Warren, Ark.
Cotton Belt Lumber Company,	Bearden, Ark.
Crossett Lumber Company,	Crossett, Ark.
Eagle Lumber Company,	Eagle Mills, Ark.
Edgar Lumber Company,	Wesson, Ark.
Freeman-Smith Lumber Company,	Millville, Ark.
Fordyce Lumber Company,	Fordyce, Ark.
Gates Lumber Company,	Wilmar, Ark.
Southern Lumber Company,	Warren, Ark.
Stout Lumber Company,	Thornton, Ark.
Valley Lumber Company,	Reader, Ark.
Wisconsin & Arkansas Lumber Co.,	Malvern, Ark.
Arkansas Land & Lumber Company,	Malvern, Ark.

Arkansas Soft Pine Bureau, Little Rock, Ark.

Gentlemen:—Send me the free samples advertised in the Canada Lumberman.

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Street No. .....

City and State .....

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Our facilities are unexcelled for making portable houses, shell boxes and other planing mill products.

We are also equipped to do milling in transit and have the men and equipment to produce the highest grade of work.

Renfrew Planing Mill
Renfrew, Ont.

Always Buy
"Made in Canada"
Products

—*Scenes from Company Owned Properties*—

Virgin Hardwood.

Virgin Spruce.

Hauling to the mill—Rhodes, Curry Company. Limited.

"From Tree To Finished Product"

Eastern Canada's Greatest Woodworking Plant

Doors, Sash
Floorings, Sheathings
Kiln Dried Lumber
Building Timbers

School
Office
Church and House
Furniture

Rhodes, Curry Company, Limited

Established 1877

Amherst, N. S., Canada

Hon. N. Curry, President *A. S. Curry, Vice-President* *C. D. Dennis, Secy.-Treas.*

Rhodes, Curry Co., Limited—the plant as it appears to-day.

Ready for export or domestic market—Church furniture produced by Rhodes, Curry Company, Limited.

R. C. Co'.s Hardwood Floorings are Unexcelled

Shell Box Material

All Sizes and Large Quantities Always In Stock.
We Ship Only First Class Material.

Quick Shipment Guaranteed

Full Stock

Spruce, Pine and Hardwoods

WRITE OR PHONE AT OUR EXPENSE.

Fesserton Timber Co., Limited

Phone Main 3658 **15 Toronto Street** **Toronto**

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Red Deer Hardwood Flooring

"Red Deer" flooring is manufactured to meet the demand for a high grade flooring at a moderate price.

Prices on this flooring and also Hemlock, Spruce, Bill stuff and Hardwood Lumber will be gladly furnished upon request.

Write us.

The Muskoka Wood Mfg. Co., Limited

Huntsville, Ontario

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WHITE and RED PINE

We can supply practically any size or grade in White or Red Pine, dry stock, and ship promptly.

STOCK AT
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Spanish (Brennan Harbor) C. P. Ry.
Cache Bay C. P. Ry.
Sellwood Junction C. N. O. Ry.
Trout Lake T. N. O. Ry.
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Cable Address—WILKLAR
Codes - - - A.B.C. 5th
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The Largest Sash and Door Factory in Canada

A Door a Minute is Our Capacity

Doors

Sash

Blinds

Mouldings

Lumber

OTTAWA PLANING MILLS.

Box Shooks

Portable Houses

North Star Refrigerators

A Modern Canadian Door Factory Producing Six Hundred Doors Every Day

"FROM TREE TO FINISHED PRODUCT"

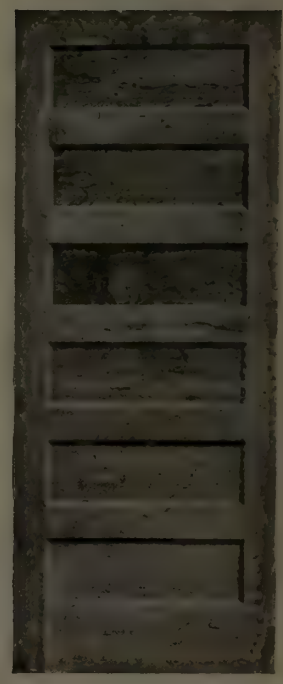
We cut the logs and saw the lumber, which enables us to meet the requirements of the trade at bottom prices.

We have a specially equipped plant with all the latest and most modern machinery for the manufacture of Shell Boxes and Portable Houses.

Our large capacity enables us to keep constantly in stock all grades of doors which can be shipped out on short notice.

No delay when you order from us

Get Our Pirces Before Buying Elsewhere



Estate James Davidson

Ottawa - Ontario

Registered Trade Mark

Registered Trade Mark

Norway White Pine Spruce

Norway

10 ft. and longer

6 x 12	4 x 7	3 x 4
6 x 11	4 x 4/6	2 x 12
6 x 9	3 x 12	2 x 11
5 x 12	3 x 11	2 x 10
5 x 11	3 x 10	2 x 9
5 x 9	3 x 9	2 x 8
4 x 12	3 x 8	2 x 7
4 x 11	3 x 7	2 x 6
4 x 9	3 x 6	2 x 5
4 x 8	3 x 5	2 x 4

10 ft. to 18 ft.

6/4 x 11	5/4 x 4/6	1 x 8
6/4 x 8	1 x 12	1 x 6
6/4 x 7	1 x 11	1 x 5
6/4 x 4/6	1 x 9	1 x 4

Clear and Clear Face Norway

6 ft. and longer

2 x 4 and up 6/4 x 4 and up
1 x 4 and up

Merchantable Spruce

10 ft. and longer

1 x 4	1 x 7	1 x 10
1 x 5	1 x 8	2 x 4 & up
1 x 6	1 x 9	

Quarter Cut White Pine Squares

6 ft. to 16 ft.

4 x 4	4½ x 4½	5 x 5
4¼ x 4¼	4¾ x 4¾	

White Pine Deals, Stock widths, all grades

3 x 5 and up

White Pine Common and Dressing

12 ft. to 16 ft.

6/4 x 8/11	2 x 8	2 x 10
2 x 7	2 x 9	2 x 11

White Pine Fine Dressing

1 x 8 and up 1 x 4/6 Shorts
5/4 x 4 and up Shorts

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Ottawa, Canada

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Registered Trade Mark

Registered Trade Mark

New Doors

WE have a complete stock of Hardwood Interior and Front Doors in Plain and Quarter Cut Oak and Birch.

Fir and Pine Doors in sizes from 18 inches to 5 feet wide in a number of designs, all with veneered panels.

Interior Trim

We are in a position to supply interior trim either to detail or for stock. Our prices are interesting.

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Rough and dressed Douglas Fir, Yellow Pine, all sizes for factory and warehouse construction. Can furnish sites adjoining railway siding or would erect buildings and lease to suitable tenants.

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Manufacturers of

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and

Unbleached Sulphite Fibre Wood Pulp for Paper Mills.

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Spruce and Birch Lumber, Shingles, Clapboards, Railway Ties and Fence Posts.

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Mill Yard.

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Full supply of Seasoned Lumber always on hand.

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HIGH GRADE PINE DOORS

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VENEERED DOORS

Not How Cheap, But How Good

Our Solid and Veneered Doors are built along this line
They are all we claim for them and more.
Their popularity is evidenced by the thousands that are sold by us. They must be right—try them.

OUR GUARANTEE WITH EVERY DOOR

SEND US YOUR ENQUIRIES

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MIDLAND, - CANADA

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RIVER OUELLE PULP & LUMBER CO.

St. Pacome, Quebec

Exterior of Mill at St. Pacome, Que.

Manufacturers of

Lumber Lath and Pulpwood

OUR Prime Quebec Spruce of most careful and unexcelled manufacture is the most serviceable lumber of the present day.

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On the I. C. R. 75 Miles East of Quebec City

Mills at St. Pacome, and Crown Lake, River Manie, and Powerville, on Nat. Trans. Ry.

Forest Products

Mill at East Apple River

Mill at Pt. Wolfe, N.B.

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Nature's Best in Woods

Man's Best in Manufacture

Spruce

Boards, Lath, Piling
Cooperage Stock, Spars
Knees and Shiptimbers
Flag and Clothes Poles
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Selected Birch or Maple

Curly Birch and Bird's Eye Maple

For Veneer Purposes

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Daily Production—
60 Tons News Print
320 Tons Ground Wood Pulp (Dry)
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40 Tons Box Board
LUMBER of all kinds:—
Clapboards, Shingles and Pulpwood

Manufacturers of

News Print Paper, Kraft Paper, Sulphate Pulp, Box Board, Ground Wood Pulp, Building and Fibre Papers, Clapboards, Shingles and Lumber

of every description

Our mills are equipped with the Latest improved machinery for manufacturing both Paper and Pulp.

We would especially draw the attention of paper Dealers to our celebrated BROMPTON KRAFT PAPER, which we claim to be the best and strongest paper of its kind made.

Our GROUND WOOD PULP is made from pure Spruce Wood, and is of a uniformly high standard.

Spruce
White Pine
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Birch

Get our stock list and prices.

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Formerly:—**Quebec & St. Maurice Industrial Company, Portland, Maine**

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Michigan Hardwoods
Hemlock and Pine

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Try out STEARNS SERVICE on mixed car shipments. Retail stocks replenished over night by our 24 hour service.

HEMLOCK, WHITE PINE, HARDWOODS, MAPLE FL'G. — *IN MIXED CARS* — SHINGLES, LATH, POSTS, MOULDING

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Spruce Lumber
Rough and Finished

Shingles, Lath, Piano Sounding Board Stock, etc.

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Fort Wayne, Indiana

Manufacturers of Hardwoods—Any Thickness From

1/30″ SLICE CUT VENEER
1/20″ SAWED VENEER
to
2″ BAND SAWED LUMBER

Specialty:

QUARTERED WHITE OAK

LOUISIANA RED CYPRESS

QUARTERED OAK — PLAIN OAK
POPLAR — ASH

Yards at—Nashville, Tenn. Basic, Va.
Mills at—Sumter, S.C. Winchester, Idaho

We can ship you promptly any of the above Stock, Carefully Inspected

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WISTAR, UNDERHILL & NIXON
Real Estate Trust Bldg., Philadelphia, Pa.

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HIGH GRADE RED CEDAR SHINGLES

LET US QUOTE YOU PRICES

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What it Contains:

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The Heavier it is the Better we like it

We Dress from 1 to 4 Sides up to 16-in. x 20-in., 60-ft.

Our grade is posstively right, and prices will please

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Mills at Craigs on the B.C.E.R.
Shipment by C.P.R.R., G.N.R.R. or B.C.E.R.R.

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British Columbia Red Cedar Exclusively

4, 5 and 6 inch "CLEAR A" Cedar Bevel Siding.
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EXTRA XXX RED CEDAR SHINGLES.

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All stock sized or matched if required.

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Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

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California White Pine
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Best Stock for Factory and Pattern Lumber

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13 Foot **SPRUCE** 16 Foot
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SPRUCE, HEMLOCK TIMBERS AND PILING AND LATH
Prices promptly given on all enquiries.
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HARDWOOD LUMBER
Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
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JOHN P. NEWMAN Wiarton, Ont.

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Good Grades — Right Prices — Prompt Shipments

Canadian Hardwood. National Grading Rules

Birch
Basswood
Maple
Elm
Beech
All Thicknesses

Also full line in

White, Red
and
Jack Pine
All grades and sizes.

Get in touch with us for prices

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WE Buy, Sell and deal in all kinds of Lumber and Timber in Canada and United States: Spruce, White Pine, White and Basswood, Ash, Cedar, Douglas Fir, Beech, Birch, Walnut, Cherry, Chestnut, Cottonwood, Hemlock, Maple, Norway Pine, Short and Long Leaf Yellow Pine, Oak, Redwood, Birch, Maple and Oak Floorings, Pulpwood Ties, and Cedar Poles.

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QUEBEC

The Canada Wood Specialty Co., Limited
Manufacturers:
Lumber, Hardwood Flooring, Handles, Poles, Bed Frame Stock, Cheese Box Hoops, Heading, Baskets, Etc.
Write, Telegraph or Telephone your orders
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LIMITED
Toronto
Sarnia
Buffalo

Re-Sawing and Dressing In Transit
done by
Savoie & Co.
LUMBER DEALERS
Manseau, Que.
On Intercolonial Railway
Write for our prices

SPECIALTIES
Sawed Hemlock
Red Cedar Shingles
White Pine Lath
Bass and Poplar Siding

James Gillespie

Pine and Hardwood
Lumber
Lath and Shingles

North Tonawanda, N.Y.

James W. Sewall

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Technical Training Thoroughness
Experience

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HAEBERLE LUMBER CO.
LUMBER AND TIMBER
White Pine, Norway, Yellow Pine, Hemlock
Oak Mouldings, Doors, Sashes and
Blinds, Cedar Poles and Ties.
Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
NIAGARA FALLS, N.Y.

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347 Adelaide St. West
Toronto, Ont.

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& CO.
LUMBER and TIMBER
Spruce, Hemlock, Pine and Hardwoods
Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.
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Do you know the worth of your Timber Lands?

My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,
Whether you want to buy, bond or sell I can be of service to you.

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Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna, Forest Commission, etc.

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All in Shipping Condition

35,000 ft. 1" No. 1 Com. and Btr. Black Ash
10,000 ft. 2" No. 1 Com. and Btr. Black Ash
AT RENFREW

65,000 ft. 1 x 8¼" and up No. 1 and 2 Com. Birch or will ship 9" and up.
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Special machinery made to order
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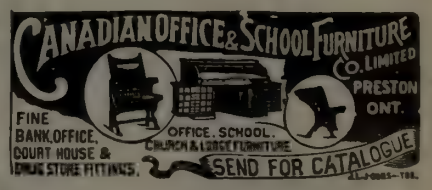
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2 cars 4 x 5 Merchantable Spruce.
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100,000′ 10 x 10 Hemlock—
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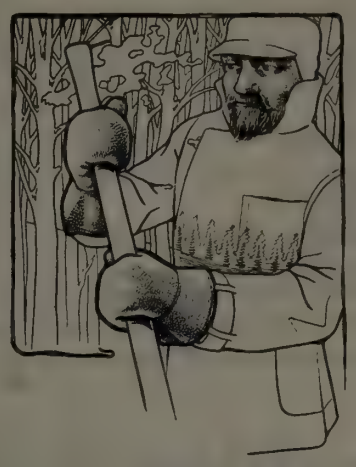
demands a seasoned work-glove—one that will stand the gaff and protect his hands. He finds his ideal practically embodied in



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Heat, steam and water won't injure "Asbestol"—they are made strong in every part and will stand up no matter how rough or hard the work.

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We specialize on cutting to order all sizes of

Dimension Timber

Also in Dressing in car or mixed lots 1", 2" and 3" to customers' specifications.

Complete stocks always ready for prompt shipment.

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Cheapest Sweetener You Can Buy

is delicious "Crown Brand" Corn Syrup.

Cheaper than sugar for making pies and puddings and serving with porridge.

Cheaper than molasses for baked beans, and on pancakes and hot biscuits.

The men will enjoy this famous table syrup, too—with its rich, delicious flavor.

Write your supply house for prices on

barrels about 700 lbs.
½ " " 350 "
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or smaller packages if you prefer them.

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Smith Car Wheels Endure

Proper distribution of metal in the design of the wheels ensures uniform strength.

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Skilful selection of material, rigid adherence to specifications, and testing before shipment are the reasons Smith Car Wheels endure.

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Specialty --- Dimension Timber

HEMLOCK YELLOW PINE NORWAY PINE

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Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

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ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

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The Lumberman's Milk

In Powder Form

Klim is pure—cheaper than fresh liquid milk. One-third the cost of condensed milk. No freights on useless water—keeps in any temperature—no waste.
Packed for camp use especially in 10 pound tins $2.00 each, the pound makes one gallon. Case lots, special price.

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Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

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Head Office: PENETANGUISHENE, ONTARIO

Box Factory, TORONTO — **Saw and Planing Mills, Box and Pail Factory, PENETANGUISHENE.**

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17,000 feet 1 x 4 — 10/16 White Pine.
15,000 feet 1 x 5 — 10/16 White Pine.
60,000 feet 1 x 6 — 10/16 White Pine.
60,000 feet 1 x 8 — 10/16 White Pine.
34,000 feet 1 x 10 — 10/16 White Pine.
35,000 feet 1 x 12 — 10/16 White Pine.
17,000 feet 1 x 13 and wider 10/16 White Pine.
30,000 feet 2 x 4 — 10/16 White Pine.
35,000 feet 2 x 6 — 10/16 White Pine.
35,000 feet 2 x 8 — 10/16 White Pine.
60,000 feet 2 x 10 — 10/16 White Pine.
17,000 feet 2 x 12 — 10/16 White Pine.
17,000 feet 2 x 13 and wider 10/16 White Pine.
Also full assortment of 2 in. and 3 in. Norway.

REMEMBER: If you want any stock milled, our Planing Mill will give you the right service.

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Our Mills Produce and We Market as Much
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As All Other Concerns Combined

250,000,000 feet constantly in stock insures filling any reasonable order promptly.
Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

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Lumber, Lath, Shingles

Cedar Poles and Posts

Railway Ties - - - Piles

An Ideal Heading Rounder
For Keg, Barrel or Cask Heads

Designed to give speed, ease of operation and safety, this Improved Heading Rounder is capable of rounding heading from an 8″ diameter to 30″ diameter.

Improved device revolves clamps before the saw touches the head. All danger of head being thrown out is eliminated.

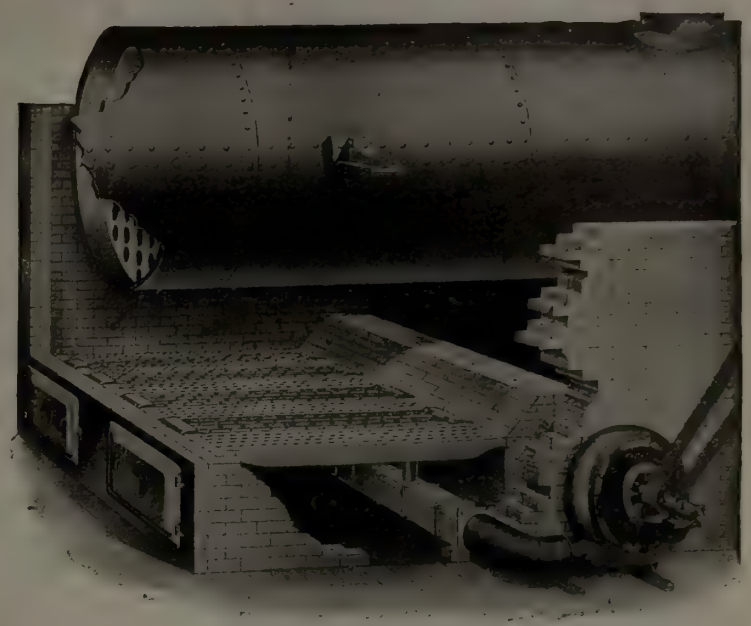
Careful workmanship and the highest grade material make this machine solid and durable. Let us tell you more about it. A request for information will receive prompt attention.

Lloyd Manufacturing Co., Limited - Kentville, N.S.

Save the Cost of an Extra Boiler

By Installing An

Improved Hot Blast Grate



under your present boiler and increasing your steaming power 50%.

Gives as good results with

Wet, Green or Frozen Sawdust

as a draft grate gives with dry wood.

Owing to the arrangement of the blast openings this grate has an efficiency nearly double that of any other blast grate made.

What One Ontario Lumberman Says :—

The E. Long Manufacturing Co.,
Orillia, Ont.

Dear Sirs—With reference to the Hot Blast Grate we purchased from you on trial about six weeks ago. We have found it to be one of the most profitable things we ever put in any of our saw mills. It is much cheaper and more convenient than any sort of Dutch oven. We placed it under two 6 ft. boilers, where we saw Spruce and Balsam logs, the sawdust of which makes poor fuel. Before we began using the blower we burned from three to four cords of dry slabs daily, and even then had a deficiency of steam, but now we have all the steam we desire, and the only fuel used is sawdust.

Yours truly,
HIGHLAND LUMBER COMPANY, LTD.,
Berriedale, Ont.

They Pay for Themselves. ***They Sell on Their Merit.***

Sold on 30 days' trial, with freight paid both ways if it does not prove in every way satisfactory.

Manufactured by

The E. Long Mfg. Co., Limited

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Agencies : **MONTREAL—Williams & Wilson, Ltd.** **WINNIPEG—Stuart Machinery Co., Ltd.** **EDMONTON and CALGARY—Gorman, Clancey & Grindley, Ltd.** **VANCOUVER—Robert Hamilton & Co.**

Pine, Spruce, Balsam and Hemlock

Hardwoods and Basswood a Specialty

The Trout Creek Lumber Co.

Manufacturers and Dealers in Lumber

F. BAECHLER, Manager

Wholesale and Retail

POWASSAN, ONT.

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Chisel Tooth Saws

The Choice of Lumbermen in two Hemispheres

More than 80,000 of these saws are now in use in all parts of the world. Hoe Chisel Tooth Saws are backed by 86 years' experience in the manufacture of saws. They are made from the finest steel, evenly tempered throughout. Special Flanged Shanks and Superior Bits are supplied for sawing hardwood.

We are the oldest Saw manufacturers in America

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Manufacturers of—

Bleached Sulphite Pulp

Spruce, Pine and Hemlock Lumber, Laths, Hardwoods

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Permanent and Portable

"The Construction which is especially suited for the Export Trade."

Bungalow at Ottawa Country Club

The Schultz Brothers Company, Limited, of Brantford, Ont., are the PIONEER Canadian manufacturers of Sectional-Portable Houses

One of the largest American Export Trading Concerns wrote us regarding a Portable House Order which we shipped for their account, under date of June 22, 1915, as follows :

"Your letter of June 19th, with various enclosures, received to-day, and we have to thank you for the most complete manner in which you have given us all these details as requested. You have shown considerable desire to work with us on this business, and we take this opportunity to thank you for it. It is a pleasure to work with people that show evidence of ability and co-operation in the export trade, as business is handled at such a great distance, and it takes a long time to conclude orders, that all concerned need hearty support of everyone else taking part in the transaction."

The Schultz Line of Sectional Buildings includes :

Bungalows
Summer Cottages
Churches
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Auditoriums
Stores
Photo Studios
Offices
Shops
Military Hospitals
Barracks
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Power Houses
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Cottage at Guelph Country Club

Schultz Sectional Buildings for all Purposes

1. High-class Designs.
2. Factory-built, accurate and complete.
3. Shipped in sections, convenient to handle.
4. Assembled before shipping, easy to re-assemble.
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9. Weather-tight and roofs that are fire-proof.
10. Materials are first-class and carefully selected.

Rural Methodist Church in Toronto

Sample Cottage on Exhibition at Paris, France
(Approved by the Belgian and French authorities)
Send for our Catalogue

The Schultz Brothers Co., Limited

Brantford, Ontario, Canada

(See description of our manufacturing plant on page 48)

Sash Doors Interior Trim

The accompanying four pictures show views of our plant and manufacturing facilities, where we are able to produce high grade sash, doors, trim, mouldings, office fittings, veneered doors, etc.

Plain and Quarter Sawn Oak Flooring our Specialty

We will be pleased to quote you attractive prices on any special work to details.

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Geo. Rathbone, Limited

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Mason Portable Houses

WE are specially well equipped for the prompt and extensive manufacture of portable houses. We have made many ready cut houses in the past and can point to tangible evidence of our ability to produce substantial and lasting buildings.

Dressing in transit is another branch of our business which receives careful attention. Our machines for this work are kept sharp and true. We can do your work promptly and well.

Let us quote you.

Geo.M.Mason Limited Ottawa

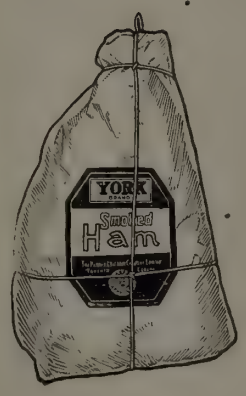
E. B. Foss, President and Treasurer. *W. I. Foss, Secretary.*

Hope Lumber Company

Saw Mills at Thessalon, Ontario, Annual capacity 50,000,000 ft. White and Red Pine, cut from the finest tract of Virgin Pine in Georgian Bay District, Canada.

Shipments by Lake or Rail, car or cargo, rough or dressed. Correspondence soliclted for both domestic and export business.

Address all correspondence to E. B. Foss & Co., Selling Agents, Bay City, Michigan, U.S.A.



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BRAND

Hams and Bacon

Long Clears	*Fresh Beef*	*Domestic Shortening*	*Barrelled Beef and Pork*	*Pure Lard*

WE MAKE A SPECIALTY OF SPEED IN FILLING ORDERS

Write or wire, our expense, of course, for quotations on all Packing House Products

The Harris Abattoir Company, Limited

Union Stock Yards, WEST TORONTO, ONT.

Stick To It

To make a success of advertising one must be prepared to stick to it, like a barnacle on a boat's bottom.

Canada Lumberman
& Woodworker
Toronto, Ont.

We are the Sole Owners of and are prepared to manufacture at our Factory in Hamilton, Ont., and to supply the Canadian Trade with any of the Devices covered by the following Patents in the Dominion of Canada.

CANADIAN PATENTS

No. 79,896 Mar. 24, 1903, Improvement in Babbitting Devices.
No. 107,380, Sep. 10, 1907, Cutter Head Knife Sharpener.
No. 108,490, Nov. 12, 1907, Adjusting Means for Planer Heads.
No. 109,194, Dec. 17, 1907, Adjusting Means for Planer Heads.
No. 109,845, Jan. 21, 1908, Adjusting Means for Planer Heads.
No. 110,216, Feb. 11, 1908, Variable Speed Mechanism.
No. 110,217, Feb. 11, 1908, Variable Speed Devices.
No. 113,311, Aug. 4, 1908, Driving Mechanism for Planers.
No. 113,478, Aug. 11, 1908, Sanding Machines
No. 115,919, Jan. 5, 1909, Knife Holder for Cutter Heads.
No. 117,080, Mar. 9, 1909, Multiple Board Gauges.
No. 120,467, Sep. 14, 1909, Multiple Gauges
No. 120,468, Sep. 14, 1909, Locking Mechanism for Gauging Devices.
No. 120,610, Sep. 21, 1909, Feeding Mechanism for Saws.
No. 121,235, Oct. 12, 1909, Feed and Adjusting Mechanism for Saws.
No. 121,236, Oct. 12, 1909, Adjusting Means for Saws.
No. 122,023, Nov. 23, 1909, Adjusting and Grinding Planer Knifes.
No. 122,172, Nov. 30, 1909, Feed Rolls for Planers.
No. 122,341, Dec. 7, 1909, Holding Device for Planer Head Bits.
No. 123,041, Jan. 4, 1910, Cutter Heads for Grooving Machines.
No. 123,239, Jan. 18, 1910, Fastening Means for Planer Knives, etc.
No. 127,643, Aug. 23, 1910, Bearings.
No. 128,664, Oct. 18, 1910, Holding Devices for Planer Heads.
No. 128,665, Oct. 18, 1910, Grinding and Jointing Devices for Planers.
No. 128,797, Oct. 25, 1910, Planer Heads.
No. 128,918, Nov. 1, 1910, Sawmill Carriages.
No. 129,089, Nov. 8, 1910, Double Acting Set Works.
No. 129,200, Nov. 15, 1910, Abrading Cylinders.
No. 129,343, Nov. 22, 1910, Planer Knife Sharpeners.
No. 129,489, Nov. 29, 1910, Improvements in Lathes or Turning Machines.
No. 135,863, Sep. 26, 1911, Cutter Heads for Edgers.
No. 137,636, Jan. 2, 1912, Spiral Indicator.
No. 138,258, Feb. 6, 1912, End Thrust Bearings.
No. 139,018, Mar. 12, 1912, Planer Knife Holding Devices.
No. 139,019, Mar. 12, 1912, Matching Planer Heads.
No. 139,020, Mar. 12, 1912, Expansion Cutter Heads.
No. 139,021, Mar. 12, 1912, Clamping Devices for Woodworking Machines.
No. 139,310, Mar. 26, 1912, Matching Planer Heads.
No. 139,311, Mar. 26, 1912, Tensioning Device for Feed Rolls.
No. 140,031, Apr. 30, 1912, Steady Rest for Wood Turning Machines.
No. 140,514, May 21, 1912, Straight Opening Drums.
No. 144,261, Nov. 26, 1912, Profile Cutter Heads.
No. 144,579, Dec. 10, 1912, Adjustable Guides.
No. 148,441, June 10, 1913, Chipbreaker for Planers.
No. 148,936, July 1, 1913, Adjusting Devices.
No. 148,937, July 1, 1913, Board Cleaners.
No. 164,577, Aug. 21, 1915, Lever Set Works.
No. 164,578, Aug. 21, 1915, Self Centering and Gauge Saving Devices.
No. 164,825, Sep. 14, 1915, Improvements in Planers and Matchers.
No. 164,826, Sep. 14, 1915, Improvements in Cutter Heads.
No. 165,077, Sep. 28, 1915, Improvements in Variable Speed Drives.

BERLIN MACHINE WORKS, LIMITED
HAMILTON, ONTARIO

The A. R. Williams Machinery Co., Ltd.

Canada's Leading Machinery House

Consult our Service Department for information on tools and equipment necessary for increased efficiency in your plant.

If you contemplate engaging in a new industry or the enlargement of your present equipment we can give you the benefit of our 30 years experience in handling the problems that will arise.

Our agency connection covers a complete line of the most up-to-date woodworking machinery manufactured and **our expert service is yours without obligation.**

IF IT'S MACHINERY—WRITE "WILLIAMS"

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Investigate the Dodds Line of Woodworking Tools

ACCURATE EFFICIENT RELIABLE

Dodds' Oscillating Mortising Machine, Lock Mortiser, or Boring Machine.

Dodds' Spiral Gear Gang Dovetailing Machines, made in five sizes. New style bed for swell fronts. Made for either Drawer or Box Dovetailing. Belt or Motor drive.

The Dodds' Machines need no introduction to wood workers; they have been on the market many years and their reputation is well established the world over wherever furniture is made. Write for further particulars. We aim to give our customers **maximum efficiency at minimum cost.**

Dodd's Saw Tables, Tilting or Stationary Tops.

Dodds' Swing Cut-Off Saws.

Belt or Motor Drive.

The Alexander Dodds Company,

Grand Rapids, Michigan, U. S. A.

Sales Agents: The A. R. Williams Machinery Co., Limited, Toronto, Canada

To Ensure Quantity—— Secure Quality

"Treat your machine as a Living Friend"

No. 132 Motor Driven Band Saw
Features: Ball Bearings, Steel Wheels, Safety Guards.

There is one object kept expressly in view in the designing and manufacturing of "Preston" woodworking machinery, and that is to set before every other consideration—Quality.

This is no empty boast. Here is a passage quoted from a letter recently sent to us by the Seaman Kent Co., Limited—it will substantiate our claim.

"We have had in operation, several of your Power Feed Rip-Saws for some time, and they are producing excellent results.

To be candid, on an even price basis, we would prefer them to several types of Saws, which we have imported. In our opinion, in these rip-saws, you have succeeded in assembling design, workmanship and finish, that should commend them to anyone looking for a first class tool."

Such is an impartial view—it is a full justification of our claim that quality is the feature emphasized throughout the machinery we make.

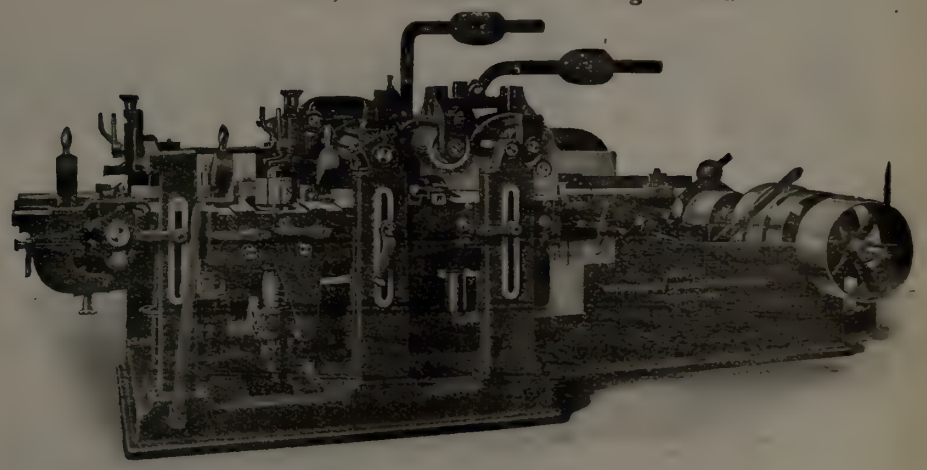
The aim of all machinery is the increase of production. You can only obtain maximum production and consistent quality from machinery which has been designed solely with an eye to quality.

We are giving special attention to motor driven, ball bearing, properly guarded woodworking machinery.

Our Claim

We maintain that we manufacture "Made in Canada" machines fully the equal of any machines imported into this country and we only want business based on the quality of our goods.

"Treat your machine as a Living Friend"



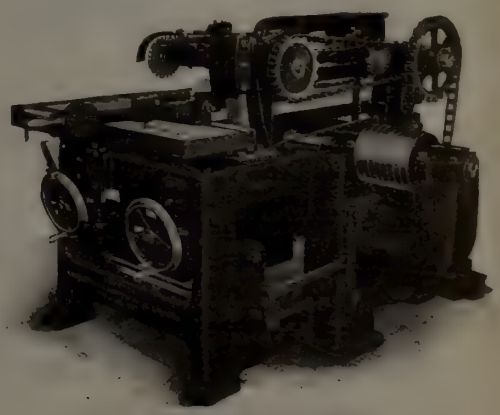
No 145 Heavy Four Side Moulder, on Base
With S. K. F. Ball Bearings for End Thrust on Side Heads and many other new features.

"Treat your machine as a Living Friend"

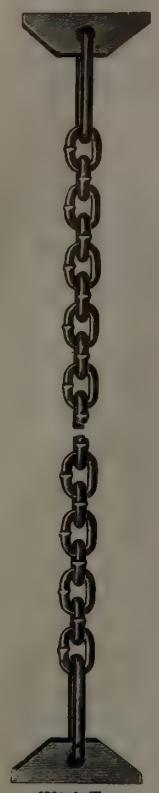
The Preston Woodworking Machinery Co., Limited

Preston, Ont.

Selling Agents:—
A. R. Williams Machinery Co., Limited, Toronto



No. 129 Power Feed Rip Saw
Frame One Solid Casting



With Two Sheared Toggles

McKINNON ELECTRIC WELD

McKinnon Electric-Weld

McKinnon Swell Weld

"Dreadnaught" Steel Loading Chain
B. B. Coil, Log, and Boom Chain

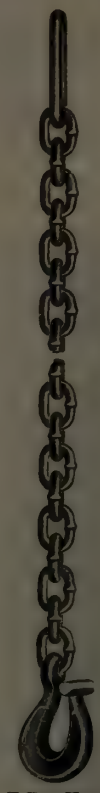
—Guarantee—

McKinnon Chain is guaranteed against defects in material or workmanship, and will be replaced free of charge if welds break before chain has stretched stiff.

MADE IN CANADA

MADE IN CANADA

5-16 in. Dreadnaught Steel Loading Chain, pulled to stock break at 9230 lbs. proving the weld the strongest part of the link. Tested at Syracuse University Septemper 27, 1912.



T-Bar Hook and Link

Made in Canada by

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Our literature will interest you and we can tell you what this Woodworker has done for others.—Write us.

No. 2 Elliot Woodworker. Patented 1910.

The Elliot Woodworker, Limited

480 Bathurst Street, Toronto

Canada Lumberman and Wood-Worker

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Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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Vol. 35 **Toronto, November 1, 1915** **No. 21**

Shall We Share in the Reconstruction of Europe?

No apology is required for the present issue of the Canada Lumberman; nor an explanation of the reason why it is being issued. Its purpose will be readily understood by lumbermen in Canada and especially by those who are engaged in the woodworking end of the industry. Its scope, however, perhaps calls for some definition; and in offering this someting in the way of explanation will also creep in.

Briefly, this issue contains many illustrations and descriptive articles, the sole object of which is to bring to the mind of the reader the fact that in Canada we have an enormous capacity for the production of those products of wood that will be required in the rebuilding of the war-devastated areas of Europe. The scope of this particular issue is to emphasize this fact. Our purpose in focusing attention so strongly upon this matter is two-fold.. Firstly, it is the plain purpose of business. We need business for the woodworking and lumber industries in Canada; we need it urgently. That is the rock-bottom reason for our special issue. We want to help in bringing the means of existence to Canadian families.

There would be no sense in masking this purpose behind any profession of desire to share in the burden of relieving our distressed allied brethren in the ruined portions of Europe. That is happily the necessary result, intimately connected with our course, and we are devoutly thankful that this is so, but we do not wish to present this as one of our objects in publishing the present issue. We will feel a glow of satisfaction when our raw and manufactured materials are assisting in restoring Belgium to its former greatness; but for us in Canada to-day the question is one—say what we will—very largely of self interest. There is a great opportunity knocking at our doors and we should do all we can to seize it.

Bearing in mind these points, there are two things that are of chief importance. The first is that those people of influence in Great Britain, and in the Allied countries, who will be in charge of the purchasing of materials shall know all that we can teach them about Canada's facilities for supplying the raw and manufactured material that will be required. The second is that we in Canada, who are in charge of plants equipped for turning out the materials shall be awake to our opportunity, and that we shall have done all in our power in advance to be prepared for securing a portion of the business.

We hope none of our readers will come to a wrong conclusion regarding the actual contents of this issue. We make no pretence of covering the field which we have touched upon. We have included simply, brief descriptions of some of those plants which seemed to us to be typical of the industry in various parts of Canada.

If there should be anyone who thinks that such efforts as these are futile, let him consider the case of Belgium alone. Belgium has been destroyed. Its homes, its factories, its churches, and its public buildings, everything in which its people lived and worked have been crumpled into ruin. It will be rebuilt, and the rebuilding will commence as soon as the enemy has been driven beyond its borders.

During 1913, in a time of peace, Belgium imported building and rough furnishing materials to the following extent:—from Germany 322,256,736 kilogrammes (1,000 kilogrammes approximately being equal to one ton); from the United Kingdom, 156,038,642 kilogrammes; from France, 145,096,746 kilogrammes; from the Netherlands, 38,073,465 kilogrammes; from the United States, 9,361,978 kilogrammes. Germany had a strangle hold upon the trade.

The Belgians are determined not to take up again their business relations with the Germans. All the great volume of trade with Germany will cease and the building materials which made up her 1913 exports to Belgium amounting to over 322,000,000 kilogrammes, must come from other countries.

A few months ago a report appeared in the press of the United States and Canada to the effect that an order for 20,000 portable houses was about to be let to a firm in Brooklyn, N.Y., the houses being for use in Belgium and the northern part of France. The story was without foundation, but it has served to bring the whole question prominently before the manufacturers of Canada and to stir them up to an appreciation of the opportunity which may develop. The production of shell boxes in Canada indicates what may be expected if our woodworking factories are put to work upon the production of material for the rebuilding of Belgium and other war-stricken countries in Europe. Our plants will be worked at full capacity; our workmen will be busy; our raw materials will be a source of profit; money will be circulated in large quantities, and, in short, a great step will be taken towards establishing normal, or even abnormal industrial activity in Canada.

Shell Box Contracts—Too Much Secrecy

Although the manufacturing of shell boxes has become of great importance to the woodworking industry in Canada and has resulted in large amounts of money being circulated among the employees of woodworking firms, we have heard much criticism of the way in which the giving out of contracts is being handled by the Shell Committee, and are in a position to say unquestionably, that there is great dissatisfaction among many woodworking companies upon this score.

For the production of shell boxes there are no plants so well equipped as woodworking factories. Of these there are thousands in all parts of Canada, most of which are running far below their normal capacities. These plants could turn out shell boxes in unlimited quantities with scarcely the expenditure of a dollar, or the loss of a moment's time, upon re-arrangement or installation of equipment. They are the logical plants for the work. Many such plants have secured contracts for shell boxes and are showing their special capacity for the work. There is no other way of getting shell boxes made expeditiously, economically and well.

In the face of this situation there are many box manufacturers in Canada who have not been able to secure orders for shell boxes; while other companies, not equipped for the work, have been successful. Instances could be multiplied, of the dissatisfaction which this sort of thing is creating. For instance, we are informed that such companies as the Deakin Construction Company of Montreal, the Cedars Rapids Construction Company of Montreal, and others, have secured contracts from the Shell Committee, while regular box manufacturers are unable to do so; or are finding it difficult to get orders direct from the Committee; while some of them are being offered sub-contracts by companies and middlemen who are not actually in the woodworking business. One of the best and largest box plants in Canada, we are informed, received contracts from the Shell Committee for 25,000 boxes, but manufactured 50,000 boxes on sub-contracts. We are informed further that a Montreal firm, not in the manufacturing of boxes themselves, have sub-let their contract to a Montreal box manufacturer. There are other cases not unlike these, cases, for instance, where a company of poor financial standing has secured a large contract, even though it had to construct a new plant for the work; and cases where agricultural implement firms and leather goods firms are getting the contracts.

The Canada Lumberman has heard many such criticisms as these. Two typical instances are important. One from a very large manufacturing firm, with equipment which is second to none in Canada, much of which is idle at present, wrote to the Shell Committee asking for contracts. They stated that they had a splendid plant; that their machines were idle; that their men needed employment; that they would like to have the Government make an inspection of their plant, and that if they were found to be properly equipped they would be glad to have a contract; knowing that they could produce the boxes in large quantities and with every satisfaction. All this company could receive in reply was a letter from the Shell Committee stating that all the orders at present available were under contract, and that if there were further orders to be given out, their name would be on the list and would be considered in its proper order. After this other firms with no financial rating received large orders, while the firm referred to is still waiting. Further letters have brought only similar replies. Other manufacturers, whose enquiries have been received a little more favorably, have been told that if they will visit Ottawa they will have an opportunity of discussing the matter with the Shell Box Committee.

There may be a perfectly clear and reasonable explanation for each of these situations, but up to date none has been offered, that we know of. We believe that the people of Canada should have a frank statement from the Committee about the whole matter. There should be nothing but the most open and fair business methods in connection with the making of shell boxes, and we do not think that the situation at present can be said to indicate that such is the case. From reports that we have received from many firms already engaged in making shell boxes, we understand that the price paid by the Shell Committee allows a fair profit, but not a large one. How then does it come about that contracts are given out to such firms as those referred to above who find it possible to take contracts and to sublet them? We confess that the problem is a little beyond us. How is it possible also for other firms to put up extensive new buildings, and install new equipment for the work, when other plants already in existence and well-equipped are urgently in need of the work and cannot secure contracts?

There should be no secrecy nor any favoritism about the giving out of contracts for shell boxes. Those who are equipped should be given contracts in a business-like sequence according to their date of application, and with proper consideration of their capacities. The public, moreover, we believe are entitled to information as to who is making boxes. The matter is one in which the public interest is too great to permit of anything which will not stand the closest possible scrutiny. We sought to secure a list of those who have contracts from the Shell Box Committee, but were not successful. We were told that the Committee could not give us such a list. We have no particular grievance on this point and might not have thought of it again had we not heard so much criticism subsequently.

Why should there be such mystery about this matter? In the interests of the Government; in the interests of the Shell Committee itself; and in the interests of the thousands of idle workmen formerly employed in the woodworking industry, it would be best to clear up the whole situation. Publicity will enable the Committee to get the fullest amount of competition in the production of boxes and it will simplify the situation greatly for all those who are interested. In the interests of the whole industry and in the interests of the lumber trade, no less than in the interests of those who wish to remove the suspicion of favoritism in a matter where only business-like methods and patriotic co-operation should prevail, we ask the Shell Committee, or the Government to take the public into their confidence fully and to clear the air of all this ugly criticism.

Will the Shell Box Committee give us a clear statement of the situation for publication in our next issue?

Our Industrial Position Improving

No one in Toronto, or in Ontario generally, will assert as yet, that there is anything like reasonable activity in connection with the building industry. We have passed through a period of unexampled stagnation so far as building activity is concerned, and in Toronto, this condition has been as noticeable as anywhere else in the country. It is important and interesting therefore, to note that there are some indications now of improvement. The building permits issued in Toronto during the month of September, 1915, covered 112 more buildings than during September, 1914, the figures being 525, as compared with 413. These totals, of course, are not so significant as they appear on the face. They merely mean a greater number of buildings for which permits have been taken out. The figures on file at the office of the city architect show, however, that in spite of the increase in the number of buildings, the value is not so great. This is accounted for by the completion of certain large structures, eight in number, which account for the total value of permits in September, 1914, namely, $726,000. The normal building operations in the city, leaving out of consideration these eight large structures, may reasonably be taken as a fair measure of building activity. The comparison made in this way shows to the advantage of September, 1915, the figures being $518,000 for this year and $446,000 for September, 1914. This is really not a matter upon which to base any extensive hope as to immediate and important improvement; but it justifies, on the other hand, the conclusion that a slight increase in building activity has developed, which is something decidedly pleasant, when one considers that a good many people in Toronto, if they had given the

matter study would have expected to see a falling off. During the month of October, the figures will show a much greater increase, for they will include $3,340,000 for the new Union Station, for which a permit was issued early in the month. There are also interesting indications of other important buildings which may be erected in Toronto in the near future.

Whatever the immediate future may hold for us in Canada in connection with industrial activity, it is most encouraging to note that, whenever one asks of his neighbor nowadays how trade conditions are, he is more than likely to receive an encouraging reply, whereas even a month ago the situation was exactly the reverse. This improvement in the mental attitude of the Canadian business man is not difficult to explain. It is the result of several factors, chief among them being two. One of these is the enormous expenditures which have taken place in Canada, and which will continue, for the furnishing of supplies of every description for the Allies in their European struggle. It required many months for these large expenditures to make themselves felt. In the first place they had to be preceded by extensive outlays in the alteration of plants and the acquiring of the necessary materials for the production of clothing, munitions, guns, shell boxes, harness, foods, etc. The quantities of material produced have been so great that the payments therefor have now commenced to make themselves felt and are causing an extensive circulation of money throughout the country. This money has now reached sufficiently far through the channels of trade to make its influence fairly general, and it is not unreasonable to expect that, to a small extent at least, it will bring about a revival of the building industry. There is still a great deal to be done in the way of filling up the great number of vacant buildings of every description in Canada to-day, before a real or normal building activity can be brought about, but the present slight improvement looks extremely like a logical outcome of the circulation of money in Canada for the purchase of war materials.

The second cause of improved trade conditions to which we referred above, is the wonderful crop that has been harvested this year in Canada. So far, this crop has been a source of expense, for its production, preparation and transportation; but the time is not far distant when returns for our crop will be coming to us in the form of cash, which will circulate also and bring about results similar to the results from the sale of war materials. These two factors must inevitably be a great boon to Canadian industrial life under the present serious strain. While we do not feel justified in predicting a period of approaching prosperity for Canada on account of the demand for her natural and manufactured products, we do feel that these markets will assist us greatly in bridging over the period of crisis which is now upon us.

The remarks made by Hon. W. T. White, Minister of Finance, in his recent address before the Toronto Board of Trade bear out these ideas very strongly. One of the most definite points made by Hon. Mr. White was that Canada was to-day richer than a year ago, and that the cause of its increased wealth was the marketing of its natural and manufactured products which are required by the Allies. Hon. Mr. White also made the remark that in his opinion the period of readjustment after the war in the case of Canada would, in all likelihood, be a very brief one.

Mr. H. R. MacMillan in South Africa

The visit of Mr. H. R. MacMillan to Canada's chief export markets for timber and lumber which has already been the direct cause of greatly increased trade with England, is being watched closely by Canadian lumbermen. Mr. MacMillan has now reached South Africa, and the following reference to his visit, which was published by the "Cape Times" of Cape Town, will be of interest to many readers of the Canada Lumberman:—

Another instance of the enterprise of the Canadian Government is indicated by the arrival in Cape Town of Mr. H. R. MacMillan, Special Trade Commissioner for the Dominion in the lumber interest. Mr. MacMillan is on a tour around the world, which has been undertaken with the object of developing the market for Canadian timber —and incidentally, too, of studying the methods of Canada's competitors. America has a big start in this industry and will take some catching up, but there is no reason why Canada, with her wonderful forests, should not enjoy a much bigger slice than she does at present of the Empire's timber trade, and, judging by the first results of Mr. MacMillan's tour, she is soon going to have it. Mr. MacMillan is a fine type of the Canadian University-trained business man, polished, shrewd and keen, and combining a gentle persuasiveness with an intimate knowledge of all the details of the gigantic industry he represents. The Canadian lumbermen have been rather badly hit by the war and the consequent high freights, and the difficulty of getting transport, and the Government took the matter in hand with characistic energy and enterprise.

"We knew," said Mr. MacMillan to a "Cape Times" representative, "that we had the timber, the quality and the prices, and at the request of the Lumber Association the Government decided to make an investigation of the markets of the world to see what could be done to put our lumber exporters on a better competitive basis with America, especially in the markets of the Empire. Most of the world's markets, indeed, are in the British Empire, and we can supply the same article at the same price and with the same promptitude as America."

Mr. MacMillan started his tour in England, and the four months he spent there—although the visit was longer than he intended—were exceedingly well spent, for the result was that the War Office and Admiralty are now buying in Canada most of the huge supplies of timber they had hitherto obtained in the United States. Questioned with regard to the prospects of his mission in South Africa, Mr. MacMillan pointed out that the Union Government had to import nearly all their railway sleepers, and there was no reason why they should not be supplied by Canada, whose railway sleepers were now most successfully and extensively used in India. In Douglas fir—or Oregon pine as it is more familiarly known—Canada had only four per cent. of the Australian market in competition with the United States, but in South Africa she had already sixty per cent. of the market for this wonderful wood, which is so extensively used for bridge and harbor works, general building and construction, street paving, etc.

After leaving Cape Town, Mr. MacMillan intends visiting Pretoria, Johannesburg and Durban, and at the conclusion of the Union tour will visit India, Australia, New Zealand, China, Japan and South America. He anticipates that his biggest fight for trade will be in Australia, which is the largest market in the world for Pacific coast timber. South Africa, said Mr. MacMillan, was very much in the same situation as Australia, and with the further development of agriculture would, in the course of time, consume immense quantities of timber. "South Africa," remarked Mr. MacMillan in conclusion, "among all the timber importing countries, has gone the furthest in making arrangements to grow its own timber, but until it does grow all it wants we will try to supply it. We are trying to develop Imperial trade at the expense of outsiders. We are going to see how our competitors are getting their business, and we are going to give them a run for their money."

A recent report from Ottawa states that official figures show that forest fires in Canada during the past summer caused losses of $9,536,867. The loss by forest fires is considerably lower this year than it was previously. Quebec Province during the eight first months of 1915 lost through forest fires $2,254,115, which is a good deal lower than the losses of Ontario, where although the forest areas are considerably smaller than Quebec's the losses by fire reached the figure of $3,694,823. British Columbia, with its vast forests, only lost $913,125, due largely to its forest fire-fighting organization. The small loss by forest fires in Quebec Province is attributed to the protective measures employed by the Government to prevent, fight and control fires.

Ontario a Great Woodworking Province

It's Plants Well-Equipped—Their Output Vast

Schultz Bros. Makers of Portable Houses

The Schultz Bros. Company Ltd., Brantford, Ont., operate a plant which is of especial interest in connection with the possibility of furnishing portable houses for the war-devastated areas. The company believe that they have one of the best equipped planing mills in Canada for filling large orders. In addition to their equipment they also carry a large stock of dry material ready to be drawn upon at any moment. In their yard they carry millions of feet of seasoned lumber of all kinds. In fact they are always thoroughly prepared, so far as raw material is concerned, for handling a very extensive business.

The firm of Schultz Bros. Company Ltd., was established in 1869 and has been making improvements to keep abreast of the times, ever since that date. They now have a full equipment of all the latest improved models of woodworking machines; also the latest thing in kiln equipment for drying stock.

The prosperity of Brantford has given it a rapid and solid growth resulting in many manufacturers establishing plants there. This has created a steadily increasing demand for large quantities of building materials. In normal years, in the neighborhood of 6,000,000 feet of lumber passes through the Schultz Bros. Company plant. If conditions warranted it the company could increase this capacity materially.

In the portable house business, the Schultz Bros. Company have already done an extensive trade. They have installed special equipment for this purpose and are in a position, from experience, to give this class of business efficient attention. They have been manufacturing portable houses for a considerable number of years and have turned out a very high class product, both in regard to design and construction. In all these respects their product ranks on a par with that of the best manufacturers in the United States. With their special experience and equipment for this work they are in a position to execute orders of considerable size and quantity. They could readily arrange their plant so as to turn out several hundred or more buildings per month if required. Having specialized upon this line of work they are able to compete favorably with the best American firms for export trade.

Among the illustrations in this issue are several referring to the Schultz Bros. Company. One of these shows the plant of the company and gives an excellent idea of its extent. In the foreground are seen the planing mills and general factory, with the sash, door, building material and novelty department; the illustration also shows the box and shook department, the offices, dry kiln, warehouse and lumber yards. In the rear of the illustration the brick plant is shown.

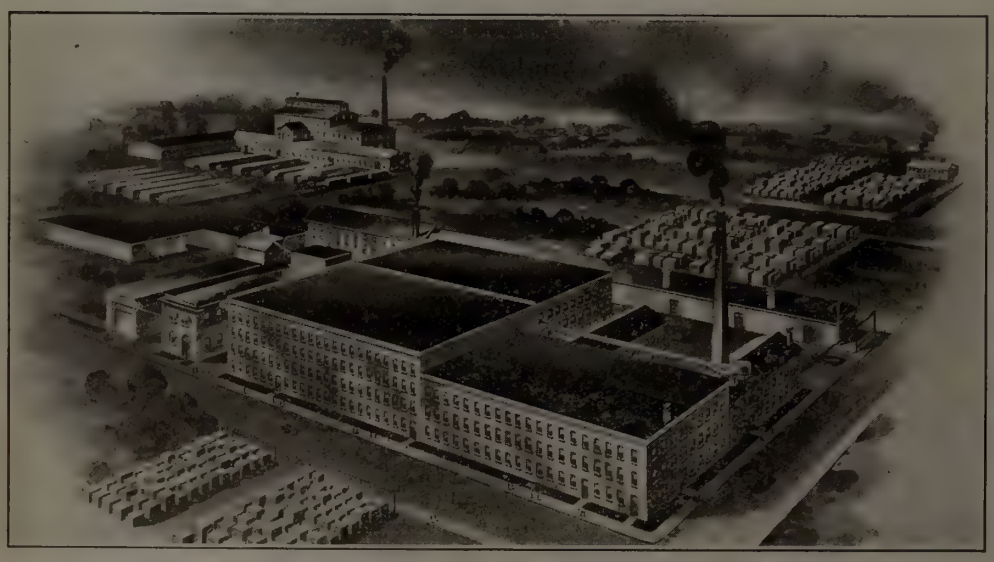
Another of the illustrations shows the portable house department where portable houses are manufactured, which are used at many Canadian summer resorts, also in connection with golf clubs and for many other similar uses. These portable houses, as can be seen from the illustration of one of them, are cozy and homelike. They are simple of construction, easy to transport and erect and their cost is extremely low. The sections are built in a department shown in the illustration. Every house is completely assembled, erected and painted in a separate part of this department, before it is shipped. On page 35 the Schultz Company mention some of the kinds of buildings that they make in portable style of construction.

Wher the Portable Houses are made—Schultz Bros. Company Limited, Brantford, Ont.

The box and shook department, part of which is shown in one of the illustrations is equipped with all the latest and best machinery, including an 8-in. Berlin band resaw and high speed double surfacer, batteries of rip and cut-off saws, squeezers, matchers, dovetailers, nailers, cleaners and bundlers.

The power plant of the Schultz Bros. Co. Ltd., consists of one 250 h.p. Wheelock engine manufactured by the Goldie McCulloch Company of Galt; also two 200 h.p. boilers with Dutch ovens, manufactured by the Waterous Engine Works Company Ltd., Brantford, Ont. These boilers also supply the steam required to operate the double improved Sidman dry kilns which form part of the company's equipment. These dry kilns are very effective. They are operated by moist air and control of the humidity, whereby the acids are removed from the wood, making it less susceptible to atmospheric influences.

In the planing mill department the company have a complete equipment of saws, planers, matchers, moulders and other heavy woodworking machines, all arranged conveniently for the handling of large quantities of lumber. Under normal conditions, two car loads of lumber pass through the planing mill department daily to be worked up and prepared for the other departments of the plant.



Plant of The Schultz Bros., Company, Limited, Brantford, Ont. Showing Planing Mills, Factory, Sash and Door Dept., Dry Kiln, Etc.

Sectional Portable Summer Cottage—Made by Schultz Bros Company, Limited, Brantford, Ont.

Part of the box department—Schultz Bros. Company Limited, Brantford, Ont.

Splendid facilities for handling timber—R. Laidlaw Lumber Co. Ltd., Toronto.

The machine department includes a large number of special woodworking machines, planers, lathes, stickers, shapers, sanders, etc., all used in preparing the materials for the sash, door, column, joinery, novelty and other departments. In this department anything in the way of woodwork for the largest or finest kind of a job is readily carried out. The novelty department operated by this company is a most interesting one, as it enables them to use up large quantities of material which are difficult to dispose of under ordinary conditions. The company manufacture hundreds of crokinole boards, triangleo boards, washing machines, rocking horses, etc. The novelty department is equipped with a number of special gigs and templates.

Further particulars regarding the products of this firm will be found on page 35 of this issue.

P. W. Gardiner & Son, Galt, Ont.

P. W. Gardiner & Son, Galt, Ont., are manufacturers of high grade veneer front doors, stock pine doors, sash, columns, etc., and have an exceptionally up-to-date and extensive plant. Their equipment is such that, in normal times, they can turn out 7,000 pine doors per month; 6,000 pairs of sash per month and 800 pine staved columns per month. This capacity could be doubled without adding to the equipment, if necessity should arise. It would only involve a little effort and re-arrangement to make provision for this. In every department of the factory the company have a complete equipment of modern machinery. Their doors are all dowelled and constructed in the latest and best manner.

The R. Laidlaw Lumber Company, Limited, Toronto

The R. Laidlaw Lumber Company, Limited, in addition to their large wholesale and retail trade operate woodworking plants at their four yards in Toronto. They also have plants at Sarnia, Windsor, Guelph, and London, Ont. Their various plants are furnished with the latest equipment for the production of all kinds of interior finish, including sash and doors, flooring, trim, etc. With their large capacity, distributed throughout their various plants, they are in a position to turn out great quantities of materials of this nature, and they would unquestionably be able to fill a large portion of any orders placed in Canada for delivery in the war-devastated districts of Europe. Their ability to take care of such orders would be greatly facilitated by the fact that they carry at all times an extensive and varied line of lumber at all their yards. Through their direct connection with important Ontario sawmills they are also in a position to secure, in the shortest possible time, large quantities of lumber to fill the place of stock used in their planing mills, and sash and door factories.

The business of the R. Laidlaw Lumber Company, Limited, was established in 1871. The head office of the company is in Toronto and in addition to the branch establishments mentioned, the company are interested in several wholesale and retail yards and woodworking factories in the United States. They have been exporting lumber also for many years to Great Britain, South Africa and South America, making a specialty of high grade Canadian white pine and red pine and hardwood flooring.

Timber handling equipment in one of R. Laidlaw Company yards, Toronto.

One of Ottawa's Important Industries

The Woodworking Plant of Estate James Davidson—Modern Equipment of Large Capacity With a Sawmill to Furnish Raw Material

Door Department—Estate James Davidson, Ottawa, Ont.

Main Corridor—Estate James Davidson, Ottawa, Ont.

The Estate James Davidson, Ottawa, Ont., operate an important and extensive plant for the manufacture of sash, doors, mouldings, boxes, box shooks, portable houses, interior trim, etc. The plant as it stands to-day was completed in 1905. It has never been taxed to its capacity, but could easily turn out, in the door department, 500 doors per day; in the sash department, 500 pairs of sash per day; in the box department a car load of box shooks and possibly 1,700 to 2,000 finished boxes; also matched lumber, such as flooring and clipped boards, at the rate of 80,000 feet per day. In the same proportion the plant could turn out frames and general house trim. Four acres of ground are occupied by the factory and warehouse buildings, including lumber and stock sheds. The plant faces the tracks of the Canadian Pacific and Grand Trunk Railways, giving ample opportunities for unloading and loading of cars.

The mill is 300 x 200 feet, with an "L" 75 x 20 feet. The dry-houses are 75 x 100 feet. One of the lumber sheds is 22 x 400 feet, and the moulding building is a double shed 80 x 200 feet. The dry kiln has a capacity of 100,000 feet, installed by Sheldons, Limited, Galt, Ont. The doors of the kiln open directly into the factory. From the kiln the lumber passes through a No. 90 new Berlin fast-feed double surfacing machine. From this machine the stock passes on to other machines, including planers, rip saws, resaws, cut-off saws, etc.

The furnaces providing power for the plant are fed with the sawdust waste produced in the plant. This is conveyed by a blower system which was installed at a cost of $7,500 by the B. F. Sturtevant Company, of Boston.

In the "L" on the main floor are located the heating and glue rooms, which are equipped in the most modern manner for successful glue work.

The equipment of the planing mill consists of one No. 90 Berlin fast-feed planer and matcher, with complete equipment of profiling attachments, one special hardwood flooring machine, one self-operating cross cut saw and one matcher, one large Mershon resaw, one S. A. Woods double surfacer, one McGregor, Gourlay gang rip saw, two Berlin stickers, one dowelling machine and two power feed rip saws.

In the door department the lumber, after it comes from the kiln, passes through a dry shed to the main building, and to the door department, without having been handled again. The stock is then planed on a Berlin No. 186 double surfacer. From this it passes through rip-saws and on to self-operating cut-off saws. The equipment for manufacturing doors consists of two complete sets, one of dowel door machinery, and the other for all other classes of doors. These machines are so placed that the material passes from one to

Interior of No. 1 Lumber Shed—Estate James Davidson, Ottawa, Ont.

Corner of Box Shop—Estate James Davidson, Ottawa, Ont.

Behind the Moulders—Estate James Davidson, Plant, Ottawa.

Woodworking Plant of Estate James Davidson—One of Ottawa's Great Industries

A Nest of Machines—Estate James Davidson Plant, Ottawa.

the other in natural sequence, so that, when the lumber is finished it is handy to the clamping machine. After clamping, the doors are all handled by a Berlin 48-in. six drum sander, of the latest type. This machine sands the doors on both sides at one operation. The best class of doors go through a single end tenoner, door sticker, chisel mortiser, chain saw mortiser, relisher and door clamp.

The material for sash goes through almost the same process as that for doors. The equipment includes single and double end tenoners, chain saw mortiser, sticker, relisher and boring machine. In the window and door frame department the equipment includes cut-off saws, rip saws, window pocket machine, groovers, beaders, and a large double-headed machine for checking the head and jambs of door frames at one operation. In addition, the equipment includes a drum and disc sander, combination iron saw tables for mitering, leveling, etc., three buzz planers or jointers and a 30-in. double surfacer, also a number of carpenters' benches. The material in this department is sanded by a Berlin 72-in. three-drum sander. A cabinet and joinery department has also been installed as an extension to the joinery department at a cost of $10,000.

The company also operate an extensive box factory in a building 100 feet square, equipped with all the latest machinery for this purpose.

The quantity of lumber carried in stock is well over 1,000,000 feet, all of which is under cover.

In addition to the large operations carried on at Ottawa, the Estate James Davidson conduct a lumber manufacturing business at Davidson, Pontiac, P. Q., at the junction of the Coulonge and Ottawa rivers, and on the line of the Waltham branch of the C. P. R., about eight miles above the city of Ottawa. At this point the company have up-to-date saw, shingle and lath mills. The sawmill is equipped with two circular saws and a gang and has a capacity of 85,000 feet per day. Most of the lumber manufactured at Davidson is utilized at the large woolworking plant at Ottawa.

Batts Limited Well Equipped for the Business

Batts Limited, 374 Pacific Avenue, West Toronto, have a splendid woodworking plant with excellent equipment for turning out large quantities of sash and doors, and many other lines of woodwork. The equipment of their plant is thoroughly up-to-date and of a nature that could be quickly, and with little expense, turned over for the manufacture of large quantities of wood products such as would be wanted in connection with the re-building of Belgium and other war-devastated countries. The company estimate that with their present equipment they could turn out about 1,000 doors a day if extensive orders were received warranting them in devoting their door plant entirely to such operations. They estimate also that, under similar circumstances, they could turn out at the same time, about 500 pairs of sash a day. Those who are acquainted with the performance of modern woodworking machinery will understand very clearly the capacity of this plant from the following list of machines making up its equipment:—

On the ground floor the equipment includes: one S. A. Woods 18-in. matcher; one S. A. Woods 15-in. moulder; one S. A. Woods 9-in. outside moulder; one American Woodworking Machinery Company 12-in. inside moulder; one American Woodworking Machinery Company 24-in. planer; one Mershon resaw; one McGregor, Gourlay jointer; two self feed rip saws; also cut-off saws and a number of minor tools.

The door plant, situated up stairs, is equipped with one American Woodworking Company 48-in. double surface planer; one Mershon band rip saw; one E. B. Hayes double end tenoner; one E. B. Hayes single end tenoner; one E. B. Hayes double end rail borer; one E. B. Hayes double stile borer; two E. B. Hayes combined stile and rail borers; one E. B. Hayes power door clamp; one E. B. Hayes door sticker; one McGregor, Gourlay surfacer; one Falls Machinery Company endless bed jointer; three Greenlee power cut-off saws; one American Woodworking Machinery Company 49-in. Columbia 3-drum sander; one Schimmel-Reid belt sander; also the necessary saws and miter machines.

The glue room is equipped with one 125-ton power press, besides the other necessary presses and retainers.

The sash department is equipped with rip-saw, McGregor, Gourlay jointer, Cowan chain mortiser, McGregor, Gourlay sash sticker, Fay & Egan tenoner, Greenlee hollow chisel mortiser and relishing machine and the necessary clamps, sanders, etc.

The cabinet shop equipment includes band saws, shaper, mitre saws, dado machines, clamps, presses, etc.

The shops and sheds of this company occupy about sixty thousand square feet. In their yards they carry a large quantity of lumber always ready for the operation of their plant. They have also large covered storage facilities for taking good care of their manufactured products. The equipment of the plant also includes an excellent dry kiln in which their lumber is treated preparatory to being taken to the machines.

Batts Limited have always made a specialty of manufacturing material to details, and are in an excellent position to handle war orders for portable house material and other similar requirements. Although they have specialized upon sash, doors, and columns, their list of products is much more extensive, and includes also balusters, base, brackets, casings, frame material, handrail, mouldings, newels, panelling, stair material, trim, etc.

Jacob Kaufman's Plant, Berlin, Ont.

Jacob Kaufman, Berlin, Ont., carries on a large lumber trade in that thriving centre and also operates a planing and matching plant which is well equipped with modern machinery. The plant turns out sash, doors and frames, and Mr. Kaufman carries in stock a large quantity of various sizes of sash and doors. He also manufactures flooring of all kinds, and house trim. The equipment of the plant includes a large modern matcher, gang saw, resaw, two moulders, end matcher, cut-off saws, shaper, pony and buzz planers, lathes, etc. The plant covers an area of over 20,000 square feet in addition to which there is a dry kiln 20 ft. x 170 ft. with a capacity of 85,000 feet of lumber. All the buildings composing the plant are of improved design, constructed of reinforced concrete. The plant has a floor space of approximately 45,000 square feet, besides office and boiler house, all of which are fireproof. The staff employed numbers about fifty men, about three-quarters of whom are skilled workmen, and about one-half of whom have been in Mr. Kaufman's employ for many years, and are therefore thoroughly familiar with the work.

Plant of Batts Limited, 374 Pacific Ave., West Toronto.

Could Increase Present Output Threefold

SPLENDID EQUIPMENT AND FACILITIES OF GEORGE RATHBONE LIMITED, TORONTO.

Office and Plant of George Rathbone Ltd., Toronto.

Dry Kiln—George Rathbone Ltd., Toronto.

A Large Plant Which Could Increase Output

George Rathbone Ltd., Northcote Ave., Toronto, have furnished us with the following information regarding their operations, which, we think, afford a fair illustration of conditions prevailing in connection with most woodworking establishments throughout Canada, with the exception, of course, of those which have been fortunate enough to secore contracts for shell boxes and which are therefore, working with large staffs. We believe that practically every woodworking plant in Canada would be placed upon a footing similar to those which are working on shell box contracts if the forthcoming requirements of the Allied Governments for portable house material were furnished by Canadian plants.

George Rathbone Ltd., are manufacturers of sash, doors, moulding, flooring, dressed lumber of all kinds, interior finish in pine or hardwood and any other kind of woodwork they can obtain orders for.

The third storey of their factory 50 x 100 feet, contains the following machinery:—1 moulding machine, 1 mortice machine, 2 rip saws, 1 cross cut, 1 surface planer, 1 buzz planer, 1 blind slat tenon machine, 1 blind stile boring machine, 1 belt sander, 1 arm sander and all other necessary equipment including glue room, cramps, wood benches, mitre machines, etc. This flat is closed for want of business.

The second storey contains carpenter shop 50 x 135 feet which is equipped as follows:—2 rip saws, 2 cross-cut saws, 1 dado saw, 1 mortice machine, 1 tenon machine, 1 moulder, 2 boring machines, 1 surface planer, 1 buzz saw, 1 relishing machine, 1 band saw, 1 shaper, 1 jig saw, 1 window frame and pulley machine, 1 drum sander, 1 arm sander, with all the other necessary equipment for a carpenter shop. This flat contains 10 men working short time. This is about one-third the number they employ in normal time.

On the first floor, 50 x 135 feet contains the following equipment:—1 band resaw, 3 rip saws, 1 swing cross-cut saw, 1 heavy surface planer and matcher, 2 double surface planers, four 4-sided moulders, 1 cut-off saw, 1 end matcher, 1 twin exhaust fan for shavings, emery grinding machine, etc. This flat at present employs 8 men working short time, one-half of their usual compliment.

In the basement, 50 x 100 feet, there are two wood turning lathes, one cross-cut saw, knife grinder, saw gummer and other tool grinding machinery. This section of the plant is closed.

In addition to the machinery mentioned above the company have a modern Grand Rapids vapor dry kiln, a 150 h.p. steam boiler and a 125 h.p. Wheelock engine.

It will be seen from the above outline that the factory is only working to about one-third of its capacity. It would take a large volume of work to bring this company's business up to normal. They have the necessary equipment for manufacturing anything in woodwork which the Allied Governments may require and they are extremely anxious to secure their share of this work. If any special machinery were required, in addition to what they already have, they would be only too glad to have an opportunity to install it if the orders secured were large enough to warrant the expense, and in their communications with us they express the belief that all other Canadian plants of the same nature would be pleased to do the same thing.

Although a large number of witnesses have been examined and lawyers and detectives have been on the case for three months, no important evidence has been secured in the investigation into the fire which recently destroyed the plant of the Forest Mills of B. C., Limited, at Compalix. The matter is one of extreme mystery.

A Corner of the Ground Floor—George Rathbone Ltd., Toronto.

A Corner of the First Floor—George Rathbone Ltd., Toronto.

The Making of Shell Boxes in Canada

A Description of the Method of Manufacture and the Equipment of Plant—The Beverley Wood Specialty Company, Toronto

The manufacturers of shell boxes, for holding ammunition required by Great Britain, has become one of the mainstays, for the time being, of the woodworking industry in Canada. A great many woodworking plants which were idle or running far below their normal capacity, commenced to receive orders last fall for the production of boxes to hold two rounds of 4.5 in. howitzer shells, and boxes to hold six rounds of 18-pound shrapnel. The production of these boxes is now being carried on on an enormous scale, and is not only resulting in employment to many thousands of Canadians, but is bringing in a sufficient profit, although not a large one, per box, to make it worth while for plants to turn them out in as large quantities as their capacity permits. The great benefit which this business brings to Canada, under present conditions, can scracely be overestimated. Not only are the mills kept in motion, and thousands of employees enabled to earn a good living wage, but the money thus circulated is finding its way through every other channel of trade, and doing a great deal towards keeping general trade conditions on a fairly normal basis. To the lumber manufacturers, the shell box business has been a great benefit, having created an urgent demand for vast quantities of spruce, which is used for the sides and bottoms of the boxes, that requests have lately been made to permit the use of pine, as spruce stocks have become scarce. A number of manufacturers advise us that this permission has been given and that some boxes are now being made in this manner. We have not, however, any official statement on this point. There has even arisen lately an opinion that B. C. fir might also be used for this purpose, and some tentative efforts have been made to have the shell committee make a change to this effect in the specifications. So far as we can learn these efforts have not yet met with success.

One of the first plants in Canada to secure an order for the production of shell boxes was that of the Beverley Wood Specialty Company, 91 Niagara Street, Toronto. To them we are indebted for much of the information published in this article. The box which the Beverley Company are manufacturing is known as the 18-pounder, 6-round shrapnel and high explosive box. At first, this box was used only for the shrapnel shells, but it was found that by a very slight alteration in the top tray it could also be used with perfect satisfaction for high explosive shells. This alteration was made in the specifications and the box is now capable of being used in either way.

At the plant of the Beverley Wood Specialty Company, lumber is received from the car right alongside of a swing cut-off saw, furnished by Cowan & Company, of Galt. At this machine the lumber is cut into sizes suitable for the Linderman dovetail glue jointer. Then it is piled on trucks and conveyed to the Linderman machine, where it is glued and dovetailed together in suitable sizes. Then the stock is put through a double surface planer, manufactured by Baxter D. Whitney & Son, Winchendon, Mass. This machine operates upon the dovetailed stock and turns it out ready to be cut to size for the boxes. The stock then travels on trucks from the planer to a Cowan automatic cut-off saw which reduces it to the sizes required. A Cowan dado machine comes into operation next and finishes the stock ready for the box nailer.

Exterior view of Beverley Wood Specialty Company's Plant, Toronto.

The two trays, top and bottom which are inserted inside the boxes are handled by a Cowan boring machine. In this machine the Beverley Wood Specialty Company use a bit which they have designed and made for themselves. This bit makes the necessary six holes in the trays, into which the tops and bottoms of the ammunition fit. The bit is a most ingenious one, by means of which the holes are bored without ever splitting any of the wood. Inside the cutters of this bit is a flat circle of steel operated by a treadle, which pushes out the core cut by the bit. This machine can be operated on combination speeds; that is to say, the output can be doubled if necessary.

The handle cleats attached to the outside of the box by strong screws are all made of material which would otherwise go to waste. These are of some good strong hardwood, such as birch, maple, oak, etc. They are put through the Cowan sticker sideways, a special arrangement of the machine having been made for this purpose. The

A corner of Shell Box Assembling Room—Beverley Wood Specialty Company, Toronto.

A section of Trimming Department on Machine Floor—Beverley Wood Specialty Company, Toronto.

cleats are then handled by a boring machine where the five screw holes are both bored and countersunk in one operation.

The above description explains the method of producing the various pieces which are assembled into the complete box. The Beverley Wood Specialty Company do all their nailing on shell boxes by hand and thus give employment to a larger number of men than they would otherwise.

The iron bands which are screwed around the sides and bottom of the boxes are purchased from a hardware company, also the screws and nails. The bands are all put on with automatic screwdrivers. The only other material entering into the composition of the box is the rope for the handles. The handle is made from a 30-in. piece of ½-in. tarred manilla rope of the best quality obtainable. This is passed through the hole beneath the cleats and its two ends are carefully spliced.

The top tray referred to above is somewhat different from the lower tray. The holes in it are bored out with an auger bit. The edges on both sides are then chamfered with a shaper. By turning the top tray upside down the box can be used for high explosives. When it is turned right side up it is used for the shrapnel shell. After the box has been completed it is inspected by the company's foreman and passed along for the final Government inspection. The Beverley Wood Specialty Company have had an excellent record in this connection, their rejections amounting only to about 2½ per cent.

The following figures and particulars give a definite description of the box, the manufacture of which has been described above.

Sides, bottom, lid and top tray 15/16-in. spruce.
Bottom tray ⅝-in. spruce.
Ends 15/16-in. birch.
Cleats on top tray 15/16-in. x 13/16-in. spruce.
Cleats on lid ½-in. x 1½-in. spruce.
Over-all length of box 14½ ins.
Over-all width of box 10 ins.
Over-all height of box 12 15/16 ins.
Handle cleats 2¾ in. x 1 3/16 in. x 6 in. held on by No. 14 1¾-in. screws.
Iron band 1 3/16-in. x 1/16-in., going around bottom of box and 10 in. up either side; attached to the sides by 4 screws in the side and two in the bottom; screws No. 14 ⅝ in.
Rope ½-in. tarred manilla, best quality obtainable.
The top of the box is square dovetailed with the tops of the two ends. From the centre of the trop at both ends a piece of stout tarred cord passes through a staple placed on each end of the box. This provides for fastening the lid down firmly. The staples used are ⅛-in. x 1¾-in.

Each manufacturer is required to stamp his name or initials on the end of the box, also the following labels:—"18 pr." — "1915" — "Mk. —".

After the inspector has passed the box he places the official stamp of the Shell Committee on one end, and the box can then be shipped and delivered.

The Beverley Wood Specialty Company is a comparatively young firm, having commenced operations about six years ago with a very small plant and staff. This has been increased steadily until to-day the firm is one of the most important woodworking companies in Toronto. The plant is equipped with some of the most modern woodworking machinery, including a number of special machines designed by Mr. A. B. Beverley himself. The firm have specialized in cabinet work of the office type, of which they still carry on quite an extensive production. The plant has excellent facilities for shipment of its product, being conveniently located close to railroad sidings. The building consists of five floors and basement, the area of each floor being 50 x 80 feet.

Sanding Department—Beverley Wood Specialty Company, Toronto.

From the kilns the lumber is taken into the cut-off room in the basement, where all the roughing out and sticking is done. In this department the equipment includes a cut-off saw, two rip saws, buzz planer and sticker. The shavings and trimmings throughout the plant are conveyed by a Sheldon automatic blower to the boiler room and are utilized for fuel, providing heat for the entire plant in winter and for the operation of the dry kilns and glue heater. A constant temperature is maintained in the storage sheds throughout the year, so as to ensure a supply of the best class of raw material for the operation of the plant. In normal times, a wing on the shipping floor is utilized as a box making department. This department ordinarily turns out about 100 boxes a day.

The first floor contains the trimming department where all the veneer work is done. This floor, like all others in the plant, is splendidly lighted and ventilated. The equipment in the trimming room consists of three trim saws, one buzz planer, one Whitney shaper, one Westside band saw, one double spindle boring machine, one double head tenoner, one upright hollow chisel mortiser, one 36-in. Whitney cabinet planer. Nearly all the rest of the equipment in the plant was

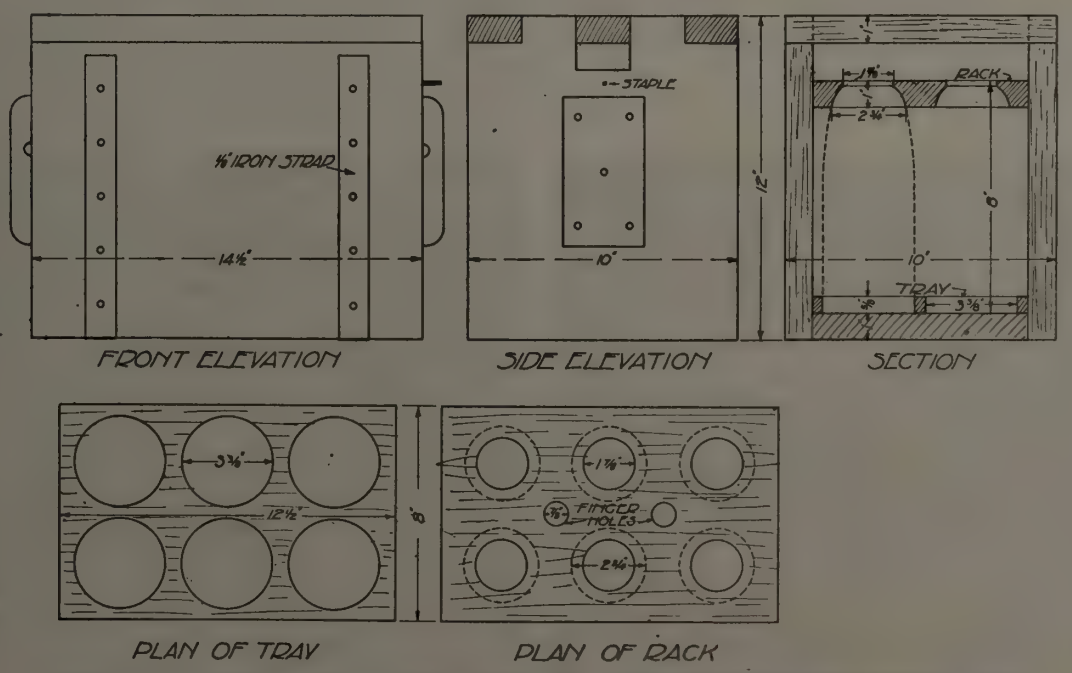


Diagram of Shrapnel or High Explosive Shell Box. Since this diagram was prepared a few changes have been made. The finger holes in the rack are now omitted. The width of the tray is 8⅛" and the width of the rack or top tray 7⅞". The 6 holes in the rack are 2½" diameter. The iron strap is 1/16" thick.

furnished by the Cowan Company, of Galt. After passing through the basement and being roughly cut to size, the lumber is put through the sticker and goes by an elevator to the trimming room, where it is glued and trimmed. Then it is taken to the next floor for sanding. Next it goes to the bench room and cabinet shop, and finally to the finishing room. Throughout the operations special provision is made for rapid and economical handling of materials. All stock is moved from place to place on the different floors by means of trucks.

The glue room, located next to the trimming room, is about 50 feet square, and its equipment includes an Advance Patent Glue Heater and an Advance Veneer Press capable of accommodating a 36-in. x 120-in. panel. Another glue press is also in operation for special coring stock.

The sanding room on the second floor contains one 42-in. Berlin three drum endless bed sander; one Lucas belt sander; one 24-in. single drum sander; one special sander manufactured by the C. Mattison Machine Works, Beloit, Wis.; one special sander, designed by Mr. A. B. Beverley, for all kinds of belt edge work; a dovetailer and shaper, designed by the company; also a Jackson-Cochrane shaper and a Ballantine type trim saw.

Hydro-Electric power is used throughout the plant, and an alternative power plant is provided by a Goldie McCulloch 150 h.p. tubular boiler, also a 100 h.p. engine of the same make.

The Tillson Company, Limited, Tillsonburg, Ont.

The Tillson Company Ltd., Tillsonburg, Ont., carry on quite an extensive woodworking business. Their plant covers a floor area of about 18,000 square feet. On the ground floor all the heavy machinery is located, including the following:—one S. A. Woods 12-in. inside moulder, one Cowan 26-in. revolving bed surfacer, one American Woodworking Machinery Company power-feed rip saw, one Cowan band resaw, one Goldie McCulloch swing cut-off saw. On the second storey the equipment includes one four-sided sticker, one universal woodworker, one Cowan chain mortiser, one 2-spindle shaper, one elbow sander, one Cowan tenoner for doors, sash, etc., one railway cut-off saw, one four drum sander, one Cowan 26-in. surfacer, one sash and door sticker, one rip saw, one band saw, one hollow chisel mortiser and relisher, one stair router, one Cowan universal saw table, one turning lathe, door clamps, sash clamps, etc.

The Nicholson Lumber Company, Limited, Burlington

The Nicholson Lumber Company, Limited, Burlington, Ont., carry on an extensive lumber trade, in connection with which they operate a well-equipped planing mill, which, in normal times, employs about fifty men and carries a stock of from 1,500,000 feet to 2,000,000 feet. The equipment of the planing mill, which is thoroughly up-to-date, includes 14 machines, among them being a Cowan & Company self-feed band resaw, a Berlin No. 108 fast-feed planer and matcher, a Ballantine sticker and moulder, a Preston Woodworking Machinery fast-feed power rip-saw, etc. The product of the plant includes flooring, ceiling, siding, mouldings, etc. The second floor of the plant is equipped, especially in the main department, for the manufacture of frames, stairs, newels, columns and all detail work. On the second floor there is also a box factory, which is thoroughly equipped.

On the first floor especial attention is given to the work of milling-in-transit. Special facilities are included for unloading direct from cars to the machines, the cars running on a siding through the mill.

George M. Mason, Limited, Ottawa

Located in the heart of the city of Ottawa and in the centre of the Ottawa Valley lumber district is the large and modern plant of George M. Mason Limited, of which Mr. George M. Mason is the president and general manager. For sixteen years the plant has been running under the above firm name, and year by year its operations have broadened

The plant covers over four acres and is located at the corner of Wellington Street and Bayswater Avenue, consisting of planing mill, sash and door factory and lumber yard. To meet the demands of their growing trade a branch yard and planing mill is now running at Woodroffe, a suburb of the city of Ottawa.

The main plant has a capacity for one hundred men and turns out all kinds of house finish, doors, columns, sash, hardwood flooring and interior trim. The planing mill is equipped with the most modern machinery and has a capacity for handling 150,000 feet of lumber per day. The sash and door factory has also a large capacity, and is equipped with all the latest machinery,

A feature of the mill, of interest to our readers, is its splendid facilities for the dressing of lumber-in-transit, in which end of the business the firm is constantly expanding. The transportation facilities are splendid, the C. P. R. and G. T. R. passing by the door.

George M. Mason, Limited, Ottawa—A section of the Yards.

In the yards lumber of all kinds is stocked, including dimension timber, scantling, rough and dressed lumber, lath and shingles, and all kinds of hardwood. A particular feature of the business is the splendid equipment for shell box work. New machinery has been installed for this purpose.

The George M. Mason Limited are already fully equipped to take care of any order, large or small, in the portable house line. For some time past they have been specializing in the manufacture of ready-cut houses and have made and shipped quantities of these all over Canada.

George M. Mason, Limited, Ottawa—Interior of Plant, showing production of Armorers Tool Boxes.

George M. Mason, Limited, Ottawa—Interior of Plant.

Plant of the Georgian Bay Shook Mills, Midland, Ont.

The Georgian Bay Shook Mills Woodworking Plant

The products of the planing mill of the Georgian Bay Shook Mills, Midland, Ont., have established a wide reputation for high grade and careful manufacture. In the neighborhood of 450 carloads of all kinds of building materials are shipped annually, consisting of such items as factory frames for some of the largest plants in Canada, house building materials of all kinds, trim, stairs, columns, doors, sash and hardwood finish. In their veneered door plant, they have an extensive output. The planing mill is up-to-date in every department, being equipped with the latest improved woodworking and sash and door manufacturing machinery. Materials are handled in this plant with great economy. The company also operate a large box shook plant, turning out 300 carloads annually. The box shook plant is also thoroughly equipped with the most modern machinery for its purposes.

The Georgian Bay Shook Mills operate a complete modern sawmill at Thunder Bay, Ont., under the name of the Thunder Bay Lumber Company. They own large timber limits, containing some of the choicest maple and beech stock in the country, and are thus in a position to manufacture from the tree to the finished product, and are never at a loss for raw material. Their plant at Midland is located alongside of the main line tracks of the Grand Trunk Railway, with three sidings running through the yards. Their plant also fronts upon the Georgian Bay, at the entrance to Midland Harbor. With their own docks, they are in a position to make immediate shipment by water as well as by rail. About 250 hands are employed during normal times, in the planing mill and box factory, and from 50 to 75 men are required for the sawmill.

For some years the Georgian Bay Shook Mills manufactured box shooks exclusively, but their business gradually extended, until now they are turning out planing mill products of all kinds, which are sold throughout Canada. Special attention is given to the production of box shooks, hardwood flooring, doors, sash and trim, but everything in wood is manufactured that is required for a house.

Should an export demand arise for goods such as this company produces, it would be in an excellent position to handle a large share of the business, as it carries on hand stocks of dry lumber, both hardwood and pine, and has an extensive steam dry kiln capacity, as well as the other equipment and machinery for extensive operations in this line.

The Pembroke Lumber Company, Pembroke, Ont.

The Pembroke Lumber Company, Pembroke, Ont., owing to their own woodworking plant having been destroyed by fire, have leased the plant of the Lee Manufacturing Company, Limited, of Pembroke, and have made additions to manufacture shell boxes. Over one hundred men are now employed in the plant and its capacity can be increased if necessary.

Their sawmill closed down at the end of October after a successful season. Eighteen and a half million feet have been cut in this mill, which, however, is not near the cutting capacity. The plant experienced a shortage of logs in the earlier part of the season. Since the mill was overhauled the cutting capacity has been increased to 150,000 feet in ten hours.

Orders for an additional $80,000,000 worth of shells were recently received by the Canadian Shell Committee, according to press despatches, which should mean further large orders for shell boxes.

A Successful New Ontario Company

At Jacksonboro, Ont., on the line of the Transcontinental Railway, the New Ontario Colonization Company conduct an important lumber manufacturing, planing mill and pulpwood rossing business. In the planing mill they have a complete and up-to-date equipment for dressing lumber and for manufacturing sash, doors, flooring, etc. A large portion of the machinery, including the planing mill resaw, was purchased from the Berlin Machine Works, Hamilton, Ont., and the balance from Cowan & Company of Galt, Limited, Galt, Ont. With their sawmill near by, the company have an unlimited supply of raw material for the planing mill. They have also an excellent yard for seasoning their lumber and in many other respects are splendidly equipped for this class of work.

New Ontario Colonization Company—Planing Mill and Saw Mill

Robert Stewart, Ltd., Guelph, Ont.—A section of General Mill Work Dept.

Robert Stewart, Limited, Guelph, Ont.—A section of the Sash and Door Dept.

Robert Stewart, Limited, Guelph, Ont.

Robert Stewart, Limited, Guelph, Ont., are one of the oldest established and most progressive firms in Ontario and have built up since 1855 a very extensive and prosperous business. The plant is situated in a three-storey building and basement, and includes all the latest types of machinery that the market furnishes for the production of high-class woodworking products. The equipment, moreover, is such that the whole factory can be turned over into making doors, or into making sash. With very little expense, moreover, the firm could turn out portable houses on a large scale. The arrangement of the plant is so well conceived, and the equipment so good, that, with very little expense, it can run on the highest class of work which is produced anywhere in the world, and yet in a day or two be switched on to the cheapest building material that is required. The plant is operated by 175 horsepower Wheelock engine.

From the Tree to the Finished Product

John Harrison and Sons Company Ltd., the oldest established lumber firm in Owen Sound, operate, in addition to their sawmills at Owen Sound and Algoma Mills, a well-equipped planing mill at Owen Sound. The equipment of the planing mill includes a Berlin matcher, Berlin double surfacer, two Berlin moulders, S. A. Woods hardwood flooring machine and two McGregor, Gourlay band resaws.

On the second floor they have a fully equipped sash and door plant including a four-head sticker, sash sticker, tenoner, Canada Machinery Corporation power feed mortiser, three drum sanders, Berlin shaper and a radial arm sander for sash. Adjoining the machine room they have a room for putting together their doors, also a large storage shed for doors, sash, etc. Another room on the same floor is devoted to finishing work and storage for special work.

John Harrison & Sons Company Ltd., have been in operation since 1869 and have built up an excellent business. Their full line covers all kinds of timber, joisting, studding, lumber, laths, shingles, hardwood flooring, doors, sash, interior trim, silos, dimension timber, ties, tie plugs and skewers. With their well-equipped plant they are in an excellent position to handle any business which may develop in the war-devasted areas in Europe.

Cargill Limited, Cargill, Ont.

An interesting planing mill plant is operated by Cargill Limited, at Cargill, County Bruce, Ontario. On the ground floor the plant is equipped for matching, moulding and re-sawing, etc. In their sash and door department and joiner work room on the second floor they have a compact and convenient equipment, the capacity of which is, 200 pairs of sash, 150 doors, 20,000 feet of matched material, 2,000 feet of base, 2,000 feet of casings, 2,000 feet of mouldings, 500 balusters, turnings, novelties, tanks, etc. The plant is built of cement blocks on concrete foundations. Steam power is used and the plant is electrically lighted. Standard dry kilns are operated, of sufficient capacity to insure thoroughly dry material at all times, together with ample storage sheds for finished material.

This company also operate various other plants, viz.—a foundry and machine shop in which are manufactured windmills and iron pumps particularly, and numerous other articles of like nature. This plant is operated by electric and gasoline power. The electric light and power plant are operated by water power.

They also operate a saw mill, stave mill, heading mill, hoop mill and cooper shop. Supplies of timber for the latter plants are taken from their own limits. The timber is skidded with a Lidgerwood steam skidder, loaded on cars by steam loader and drawn to the mills over their own railway by a gasoline locomotive, delivering timber at the mill skidways, whence it goes directly into the mills. The heading mill, besides being equipped with the usual machinery, has a Linderman machine by the aid of which narrow pieces may be united with a dovetailed glue joint, doing away with the trouble of having too many pieces in heads. Ample sheds are provided for storing manufactured goods. All kinds of kegs and barrels are made by experienced coopers in the cooper shop.

From the above outline it will be seen that Cargill Limited have a very complete plant for economically utilizing all of their raw material and that they are therefore in an excellent position to manufacture their products and sell them at attractive prices.

The Ludlam-Ainslie Company's Two Plants

The Ludlam-Ainslie Lumber Company, Leamington, Ont., operate planing mill plants both at Leamington and Hamilton, which are equipped with everything up-to-date that is necessary for their work. In the two plants they have between 30,000 and 40,000 feet of floor space, all of which is occupied with the very latest things in labor-saving machinery. With this modern equipment they are in a splendid position to handle a large volume of business in sash, doors, frames, and all kinds of interior trim. They make a specialty of the production of hardwood finish, for which they have filled many important contracts in Windsor, Walkerville, Fort William, Port Arthur, Sault Ste. Marie and other cities and towns. Along their own line of business they are prepared to execute any orders, and could increase their output greatly by the employment of extra hands.

The Ludlam-Ainslie Company—View of Carpenter Shop at Leamington, Ont.

McAuliffe Davis Lumber Co., Ottawa

Fine Equipment and Practical Layout of Plant

The McAuliffe Davis Company, Ltd., Ottawa, operate on Chamberlain Ave. a very complete planing mill plant. Their buildings at this location were erected at a cost of $30,000 and their machinery cost $25,000. The heavy machinery is located on the main floor, the lighter machinery upstairs. The equipment was purchased from the Berlin Machine Works, the American Woodworking Machinery Company, and the A. R. Williams Machinery Company. The factory building is 120 x 90 ft. two storeys high. Power is developed by two boilers and a Corliss 150 h.p. engine. Approximately, the plant will handle 10,000,000 feet of lumber annually, and about two-thirds of this will be put through the machines. The company manufacture many other things, sash and doors, hardwood flooring, mouldings, newel posts, etc. They also operate a planing mill on Duke Street, Ottawa, in connection with their head office and yard "A." At this point they have exceptionally large storage yards and do a large amount of milling work, for which they have installed modern equipment. Each machine in this plant has a unit motor drive. The building at this plant covers a ground space of 99 feet x 200 feet.

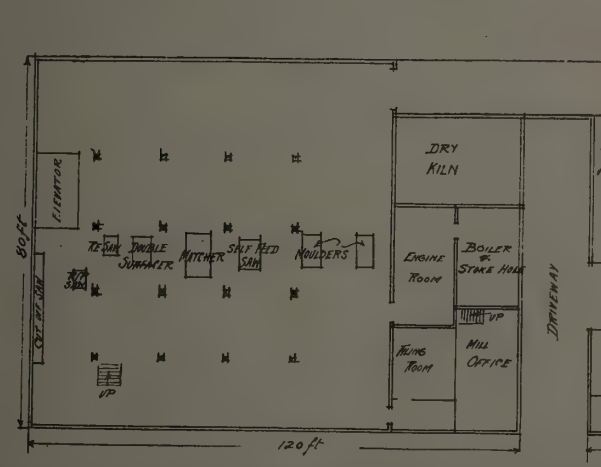
The McAuliffe Davis Lumber Co. Ltd., operate, in all, three planing mills and one sash and door factory. In the sash and door factory they have every kind of equipment necessary for taking care of any woodworking orders required in the construction of houses. The company advise us that they would be prepared to increase their staff, and if necessary, work 24 hours a day, in order to assist in turning out a large number of portable houses that might be required on short notice. They could work about 200 men to advantage in this plant, and would be prepared to guarantee delivery of a certain number per day, if they were furnished with definite plans of the houses required.

The company purchase their lumber in large blocks and are in a position to secure it at very attractive prices in the Ottawa market. They could therefore furnish these houses at as low a cost as would be consistent with proper material and good workmanship. In discussing the class of lumber required they say that they presume sound

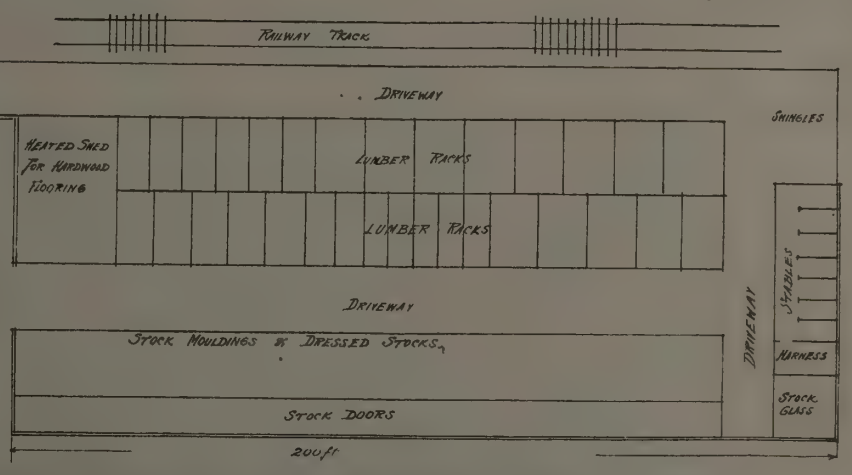
Interior of plant at Yard A—McAuliffe Davis Lumber Co., Ottawa.

red pine or spruce would be acceptable. They are particularly well supplied with this class of lumber. If hemlock would be accepted, however, they are of the opinion that it would be very serviceable and could be supplied at a less cost than any other lumber in the Ottawa market.

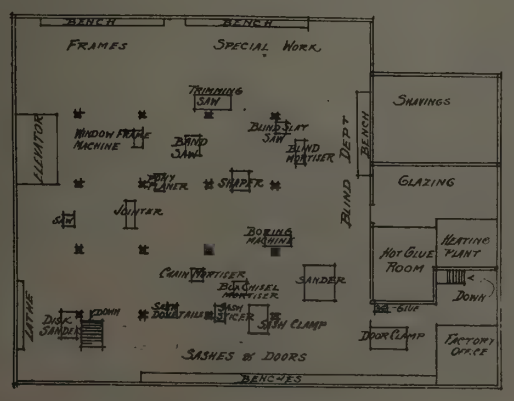
The McAuliffe Davis Lumber Company Ltd., make anything and everything in the woodworking line in connection with house building, their specialty being to look after this line of trade. Their product includes all kinds of doors, blinds, frames, hard and softwood trim, etc. They also supply all the rough and dressed lumber required for any class of building.



First floor plan at Yard B—McAuliffe Davis Lumber Co., Ottawa.



Plan of Yard B—McAuliffe Davis Lumber Co., Ottawa.



Second floor plan at Yard B—McAuliffe Davis Lumber Co., Ottawa.

In the Duke St. Mill of The McAuliffe Davis Lumber Co., Ottawa—A Berlin "91" Fast Feed Planer and Matcher.

Mickle, Dyment & Son, Brantford, Ont.

Mickle, Dyment & Son. of Brantford, Ont., have one of the largest and most up-to-date woodworking plants in Canada devoted exclusively to the manufacture of Builders' Supplies. The factory, 70 x 130 feet, and only recently constructed, is situated on the corner of Clarence and Colborne Streets, and is of two storeys, with modern dry kiln adjoining. In addition to this they have a new lumber shed and warehouse 50 x 100 feet, which is also of two storeys.

The Brantford business is only one of a chain of planing mills with the head office at Barrie, Ont., and saw mills and timber berths at Gravenhurst, Severn, Whitney and Fenelon Falls. All these points provide a short railroad haul to Brantford, with the added advantage of this firm being able to bring in large quantities of lumber on short notice. In short, Mickle, Dyment and Son control the output of their vast timber limits from the log to the finished product received by the consumer.

The capacity of the Brantford plant is from twenty-five to thirty thousand feet of lumber per day, run into flooring, siding, mouldings, trim, sash, doors, frames and other builders' supplies. The first floor is taken up with the planing mill, where sizing, surfacing, matching and resawing are done in large quantities, also with the manufacture of mouldings in all sizes and patterns. The machinery installed in this department is of the newest type and includes one band resaw, one high speed matcher, one double surface planer, two power-feed rip-saws, two heavy moulders, one heavy jointer and two cut-off saws.

The second floor is given over to the manufacture of sash, doors, frames, stairs, cabinet work, store and office fittings, and, like the planing mill, is equipped with only the latest and most approved machinery, the firm realizing that the equipment of plant in any large factory of this nature has a very important bearing upon the quality, as well as the quantity, of the output of the finished article. The machinery includes a double set of tenon machines, mortise machines, stickers, sanders, shapers, variety saws, cut-off saws, rip saws, turning lathe and boring machines, with benches to assemble the various kinds of work.

The lumber sheds and warehouse adjoining the plant are kept fully stocked the year round, thus ensuring that all wood used in the factory is well seasoned. About three million feet of lumber is carried in stock at all times.

The manager of the Brantford plant, Mr. O. W. Rhynas, has been associated with the woodworking business for many years in all its different branches. The large business built up by this firm during the past few years, and the record which it has for fair dealing, are largely due to his efforts.

A corner of the Sash and Door department in the plant of Mickle, Dyment & Son at Brantford, Ont.

Behind the Matchers in the plant of Mickle, Dyment & Son, at Brantford, Ont.

Mickle, Dyment & Sons, Plant, Brantford, Ont.

The Reader's Viewpoint on European Trade Prospects

Canadian Plants Urgently in Need of Orders

Editor Canada Lumberman:— Toronto, Ont.

We are sending you separately our reply to your request for information regarding wood products that may be required for the use of the Allied Powers in the reconstruction of the war-devastated countries in Europe.

You will notice from our letter, that we are not in a position to state what our capacity is in certain lines of manufacture, owing to our business being of a general character.

We do not think there is any doubt about the capacity of the woodworking industries of Canada to supply any order which the Allied Powers may require, but there would possibly be a little delay upon the first orders, if they were wanted in a great rush, on account of stocks being low in the yards of the woodworking industries.

Under present conditions, almost every firm is buying only what it thinks it can use in a reasonable length of time. This is perhaps a wise policy to adopt, as every manufacturer naturally wants to save all the carrying costs possible.

Probably some comment might be made upon the advantages that accrue to the governments from woodworking industries when they are fully employed. The increased revenue from the stamp tax upon cheques and notes, increased postage, and the 7½ per cent. war tax upon lumber from the United States, are all sources of revenue for the Dominion Government, and are worthy of Government consideration.

An increase in the lumber business is also a source of revenue for the provincial government, as it increases their revenue from the Crown lands. Increased employment would also be an important factor in the income for the Workmen's Compensation Insurance Fund. The high rates which the woodworkers have to pay to this fund, and the heavy business tax to the municipalities, fall heavily upon manufacturers during this depression. Of course, there is a difference in the two taxes. In the Workmen's Compensation tax a premium has to be paid only upon the wages actually paid out, but the business tax is normal whether a plant is operated or closed up.

We think Canada is in a position at the present time to supply all the rough and manufactured wood products that the Allied Powers may need. **There is a very large woodworking capacity in Canada that is almost dormant at the present time, owing to the severe depression caused to the lumber and woodworking industries by the war.** If it were possible for the Dominion Government to use its influence to secure orders from the Allied Powers for the wood products they require, we feel sure that every woodworking establishment in Canada would appreciate the Government's efforts in this direction.

The work could be allotted by the War Purchasing Commission and be distributed throughout the different industrial centres, according to the capacity of the firms that are in a position to undertake the work. This would have a strong tendency to relieve the severe industrial depression that the woodworking industries are now passing through. It would also find employment for a large number of men who are now idle, and this would, no doubt, be a great help to cities and towns throughout the country, as it would relieve the pressure upon them for assistance, resulting from lack of employment. The facts which we are giving you separately regarding our own mill will be, we think, a fair illustration of conditions in all similar woodworking establishments in Canada, excepting those that have been fortunate enough to secure contracts for shell boxes.

Some of the firms that do general work find it to their advantage to purchase a portion of their requirements from firms that specialize in stock articles. Under present conditions, however, both specializing firms and those doing general work could soon adapt themselves to produce all that is required by the Allied Powers in the way of manufactured woodwork.

One matter we would like to refer to particularly. Owing to the depression in business, lumber stocks have been decreased. The millmen did not feel justified in taking out large stocks when there was not sufficient demand for lumber to absorb their output. The same thing applies to the woodworkers. They have only been buying what they were compelled to buy, on account of lack of business. Consequently their stocks are low, and if any good-sized orders were awarded to be filled upon very short notice, it would probably take a little time to obtain the necessary lumber from the sawmills. If these conditions could be anticipated by the Dominion Government, or any other body with authority to act for the Allied Powers in making purchases for them, it would be a material advantage to all parties interested if a reasonable time could be given to fill the first orders. All subsequent orders could unquestionably be attended to promptly.

In our plant, we have the average planing mill and sash and door factory, and as conditions are about the same all over Canada, it can be seen readily that there is a very large percentage of both idle space and idle machinery that could be utilized to good advantage in the manufacture of war supplies in wood, throughout the Dominion of Canada, if work were obtainable. Such orders would unquestionably be a great boon to all those firms engaged in the woodworking industries.

Any orders given to the woodworking industries that would enable them to increase their output, would materially help to increase the business of other firms that furnish supplies to the woodworking companies, such as machinery, belts, oils, saws, knives, tools, fuel, stationery, postage and many other articles used in the business.

We feel assured that if the actual conditions of the woodworking industries were presented to the Dominion Government by a representative deputation, the Government would make some effort to obtain orders for wood products from Allied Powers that could be furnished to advantage by Canada.—George Rathbone Limited.

* * *

Could Double Capacity Quickly

Editor Canada Lumberman:— Galt, Ont.

We have your recent favor relating to your special issue dealing with the ability of Canadian woodworking plants to turn out material which may be required in the re-building of the war-devastated areas in Europe, and we take pleasure in saying that your efforts along this line are very much to the point.

Irrespective of our desires and efforts, the principal thing is to know what we can do about it when the opportunity offers. We are advising you as to our factory capacity, conservatively estimated.

To our mind factory capacity and the ability to deliver the goods required are not quite the same thing. Take our own case, for instance. We manufacture number one quality pine doors, sash and columns. The doors usually required for export trade are lower grade, and the price is low. It would therefore be necessary for us to know something of the quality of doors required, and the price likely to be paid before guaranteeing any specified output or delivery.

Knowing the great difficulty or impossibility, in the past, of coming to a satisfactory arrangement with Canadian lumber manufacturers, it seems to us that to-day we are at the meeting of the ways, between the men manufacturing lumber and those who make that lumber into the finished product. Considering the importance of the matter, and its possibilities, surely it calls for some action.

The information about our capacity, which we have given you in another letter, shows the normal capacity based on what we have done in normal times for domestic trade. Should conditions arise, calling for twice the output, a little effort and re-arrangement would make provision for this. In our opinion, with united effort the Canadian manufacturers are in a position to deliver the goods.

We appreciate your able and earnest efforts to help the interests you represent.—P. W. Gardiner & Son.

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B. C. Mills Anxious for the Business

Editor Canada Lumberman:— Fraser Mills, B.C.

We are at present selling large quantities of lumber to the British War Office. This consists, however, of material for bridges, railways and trench coverings, as well as walls. This lumber is moving by water through the Canal. In regard to material for portable houses, we may say that this matter is now being looked into carefully by the B. C. Manufacturers' Association, as well as by the B. C. Government Lands Department, and many of the mills out here have London connections which are keeping closely in touch with this matter.

More, however, can be accomplished by co-operation of all parties interested, and we are pleased to note that you are contemplating issuing a special edition of your paper, looking towards the development of this trade. —Canadian Western Lumber Company, Limited.

* * *

Could Turn Out Many Portable Houses

Editor Canada Lumberman:— Pembroke, Ont.

We are unable to give you much information regarding your enquiry about the facilities in Canada for handling large orders for portable houses. Personally, we could not judge our own capacity until such time as we see the blue prints and specifications, although we do not see any reason why we could not turn out a large number of them here in a reasonably short time. We have every facility for this work, including the lumber, finishing material and labor.—Pembroke Lumber Company.

* * *

Canadian Plants Able to Handle the Business

Editor Canada Lumberman:— Kingston, Ont.

We have received your favor suggesting the advisability of placing before the Purchasing Commissions of the Allied Powers arguments in favor of Canadian wood products. This suggestion meets with our hearty approval. We cannot say how Canadian prices would compare with those of other countries, but we do not see why Canada should not be able to furnish these goods at as attractive figures as others. For our part we have a plant. the output of which we could easily treble. The improvements and enlargements we have made during the last few years would make foreign orders very welcome to us.—S. Anglin & Company.

Plant of W. C. Edwards & Co., Ltd., New Edinburgh, near Ottawa, Ont.

W. C. Edwards & Company, Limited, Ottawa

One of the most notable woodworking plants in Canada is that of W. C. Edwards & Company, Limited, Ottawa. It would be impossible to give an adequate description of such a plant in the limits of our space. A few of the outstanding points, however, will be interesting and will illustrate the fact that this firm is in an exceptionally good position to handle war orders for many kinds of wood products. The woodworking plant is located at New Edinburgh, Ottawa, and is housed in a solid reinforced concrete and brick building, which is as nearly fireproof as engineering skill and money can make it. In the sash and door and interior finish factory, employment is afforded to between 75 and 100 skilled mechanics who operate upon a wide variety of woods, including red and white pine, birch, red oak, plain and quarter-cut oak, ash, beech, maple and basswood. All these woods are carried in stock and the firm also import large quantities of mahogany, walnut, teak, red gum, cypress, yellow pine, white wood, white oak, plain and quarter-cut oak, etc., for the production of high class interior finish.

One of the most interesting departments of the plant is that in which its doors are manufactured. In the planing mill the equipment includes five planers, one power trimmer, one self-feed rip saw, one edger, and many other types of machines. The company also operate a hardwood flooring factory in which they turn out many excellent kinds of flooring. They have also a large box factory where all sizes and shapes of box shooks are produced, giving employment to over eighty men.

J. R. Eaton & Sons Fine Plant at Orillia

One of the most important woodworking plants in Ontario is that of J. R. Eaton & Sons, Limited, Orillia, Ont., manufacturers of general mill work, including hardwood flooring and exterior and interior finish. The plant which they are now occupying is a new one, built to replace their former plant, which was recently destroyed by fire. The site of the plant is an area of nearly 12 acres, with a frontage of 500 feet and a depth of 1,000 feet. The main building is 151 x 304 feet, one storey, of full mill construction. In planning the building, special attention was given to the matter of lighting, which has been secured from all four sides and from skylights. The floor is of concrete, giving a thoroughly rigid base for the heavy machinery. The former plant, when working at full capacity, carried about 1,500,000 feet of lumber, but with the added facilities of the new plant considerably larger quantities can be stocked.

One of the most interesting features in connection with the plant is its excellent dry kiln, of the box or pocket type, furnished by the Grand Rapids Veneer Works, Grand Rapids, Mich., who were given the order to supply a battery of eight fireproof box kilns of the latest type of construction. These kilns are built of hollow tile and cement, and have a unique system of transfers and elevators operated by electric power, which enable the firm to handle their lumber at a minimum cost from the railway siding to the kiln, storage and factory. Of the eight boxes making up the kiln, four have a capacity of five cars each, the capacity of the other four being two cars each. This arrangement enables the company to avoid variations of temperature, and to dry different varieties of lumber independently. The kiln is 80 feet by 62 feet.

Adjacent to the kiln there is a large storage shed for drying the lumber and for storing it after it has emerged from the kiln. This building is kept at a fixed temperature throughout the winter. These buildings are situated at the east end of the factory. To the north of the factory there is also a dressed lumber and freight shed for loading and shipping the finished product. The company have also installed a large number of high-speed machines, several of which are operated by individual motors.

For conveying shavings and waste the plant is equipped with an endless chain conveyor, which does away entirely with hand firing, and prevents air from being blown into the furnace. This is said to be the first equipment of its type installed in a Canadian plant. Power for the plant is provided by a Wheelock 225 h.p. steam engine and two boilers of 150 h.p. each. Electrical energy both for power and lighting is generated on the premises.

J. R. Eaton & Sons, Limited, produce all sorts of mill work, including exterior and interior finish, hardwood flooring, woodwork for offices, apartment houses, stores, dwellings, etc., also veneer doors. One of their specialties is hardwood flooring. They also turn out large quantities of hardwood interior finish manufactured to architects' details. In addition to this the company carry on a large business in milling-in-transit for the wholesale trade. For this class of work they have the finest equipment that can be secured.

The shipping facilities in connection with this plant are excellent. The company have about a mile of sidings on the G. T. R., with interswitching connection to the C. P. R. and Canadian Northern Railway.

Pulp and Paper Mills Busy

The Canadian pulp and paper industry is evidently prospering. Since the opening of the current fiscal year exports to the United States especially have grown. July Government returns show exports of newsprint to the United States of $1,274,000. The export business of Canadian mills for the first four months, April to July, aggregated $5,098,799, of which the United States accounted for $4,589,144. In 1914, only $2,176,000 went across the border that year. As an indication of recent growth this year's business so far is almost equal to eight months' business in 1913, and surpasses eight months' business in 1912, the total then being only $3,110,000. While the United States is Canada's best customer, the statement points out that another encouraging feature of the trade is the growing trade within the Empire.

For the fiscal year 1913-14 the total exports were $8,030,000, for 1914-15 $12,600,000, while the rate of the four months this year is between $15,000,000 and $16,000,000 per annum. The first four months of 1913, 1914 and 1915 compare as follows in exports of newsprint:—

	1913	1914	1915
April	$ 596,554	$ 836,110	$ 970,445
May	810,575	1,092,172	1,341,243
June	874,284	1,135,283	1,345,444
July	793,898	1,149,569	1,441,647
Totals	$3,075,319	$4,213,134	$5,098,779

Plant of Benson & Bray, Ltd., Midland, Ont.

Benson & Bray Plant at Midland, Ont.

One of the most important woodworking plants in Ontario is that located at Midland, and operated by the firm of Benson and Bray, Limited. The business was commenced in 1905, in a very small way, by Mr. Benson, and rapidly attained large proportions. The plant of the company to-day is equipped with every modern type of machine for the production of sash, doors, and interior finish. The plant is a new one, completed in March, 1913, and represents an expenditure of over $120,000. The building is of brick and concrete, two storeys high, 240 feet long by 74 feet wide. It provides ample room and light for successful operation. The mill proper is 200 feet long, two storeys high.

The first floor throughout the plant is of concrete, ensuring perfect rigidity, a most important feature in the operation of such a plant. The equipment of the planing mill includes, on the lower floor one S. A. Woods No. 401 fast-feed matcher, equipped with automatic feeding table, taking stock at 200 feet per minute, one inside moulder, No. 107 B, made by the same firm, equipped with profile joining attachments, making mouldings at 100 feet per minute; one Cowan moulder, 13-in. four-side; one Ballantine four-side moulder; one Berlin double surfacer No. 177; one Berlin band resaw, No. 289; rip and cut-off saws, etc. On the upper floor the company have a full equipment for the manufacture of sash and doors, made by the E. B. Hayes Company, Oshkosh, Wis.; one Berlin triple drum sander; one Mattison belt sander; one buss shaper No. 8; one Whitney cabinet planer, etc., in all, a total of 30 machines.

For receiving and shipping goods, the company have excellent facilities. Railway sidings are located on each side of the plant. Stock arrives at one side; the lumber is passed through the machines and comes out ready for loading upon the empty cars on the other side of the building. The product of the plant consists of solid and veneer doors, sash, mouldings, flooring, and all high-grade planing mill products. In addition to this the company make a specialty of working lumber in car lots, for which they have excellent facilities, being in a position to handle four cars at once.

The C. Beck Company, Penetanguishene, Ont.

One of the pioneer industries at Penetanguishene, Ont., is that of the C. Beck Manufacturing Company, founded by the late Mr. C. Beck in the early seventies of the last century. Their chief industry is the production of lumber, for which they have one of the best mills on the Georgian Bay, turning out about 80,000 feet in a 10-hour day. In addition to this, they operate a box and shook factory, with a large output, and a pail and tub factory, which use up a great deal of the material from the sawmill that would otherwise go to waste. These plants are equipped with the latest type of machinery for the various processes required.

The company also carry on an extensive business in planing-in-transit, for which they operate a new fast-feed Berlin matcher installed in their box factory. They have splendid facilities at Penetanguishene for handling stocks both by rail and water. Their annual cut of lumber amounts to about 16,000,000 feet. Both in furnishing supplies of lumber and in working them up into finished products this company could play an important part in connection with furnishing such materials as may be required in Europe.

Benson & Bray, Midland, Ont.—View on First Floor.

Benson & Bray, Midland, Ont.—View on First Floor.

The Boake Manufacturing Company, Toronto

The Boake Manufacturing Company Ltd., Toronto, a firm which has been in existence for 23 years, is a typical example of the successful retail lumber business which has expanded with the growth of a large city, until it has become far more than a simple retail lumber business. This company, with its excellent yard equipment, its large supply of timbers, and its modern planing mill equipment is well situated for handling a share of such orders as may grow out of the necessity for rebuilding the war-devastated areas of Europe. Its planing mill is about 135 ft. by 116 ft. long and is equipped with the very latest types of machinery, including one American Woodworking Machinery Company planer and matcher; one Berlin fast feed planer and matcher; one Connell & Dengler band resaw; two self feed

Modern Facilities for Timber Dressing—Boake Manufacturing Company's Plant, Toronto.

ripsaws; one 10-in., one 12-in. and one 14-in. four-sided outside moulder, also a cut-off saw and a timber sider for dressing four sides of timber up to 17½ in. x 24 in. any length. The company keeps on hand at all times a large stock of timber and lumber, both for its trade in these products, and for raw material for its planing mill. It is thus in a position to handle extensive orders on short notice.

Lt. C. P. Waldie Wounded and Missing

We regret to report that, since our issue of October 15th, in which we published a report that Lt. C. P. Waldie, of the 8th West Surrey Regiment, formerly of Toronto, had been wounded, a further report has been received that Lt. Waldie is "wounded and missing." His family in Toronto have received no further word. They have had a search made of all the hospitals in which he might have been received, but without result.

A meeting of the Shingle Makers' Branch of the West Coast Lumber Manufacturers' Association was held at Everett, Wash., recently, and, as a result, it is more than likely that, in the near future, the price of shingles will be advanced by the members of the Association, and that this step will be followed by one of the most extensive advertising campaigns ever inaugurated by shingle manufacturers. If an agreement can be secured from 75 per cent. of the shingle mill owners of the northwest, this plan will be put into operation. The decision to inaugurate an extensive advertising campaign was reached in order to off-set the competition of the patent roofing firms.

The Canada Lumber Company, Weston, Ont.

The Canada Lumber Company, Weston, Ont., although a comparatively young firm, is one which has made rapid progress and has worked up an extensive business. It operates a plant for the production of many important classes of interior finish. The plant is equipped with modern machinery, including moulders, stickers, variety saws, turning lathes, clamps, etc; in fact a full equipment of modern machinery for turning out all important planing mill products. Although the plant has been working practically at its normal capacity from its commencement, the company could double its present output if sufficient orders were received to make it necessary. In all, the company operates about 18 machines. Weston, Ont., situated on the outskirts of the city of Toronto, has excellent shipping facilities, which would enable the company to make quick delivery of goods required urgently for foreign shipment.

Renfrew Planing Mills, Renfrew, Ont.

The Renfrew Planing Mills, Renfrew, Ont., are among the many mills of the country that are expanding to meet the needs of the export situation and conditions arising as a result of the war. This industry was established in Renfrew in 1910 and is one of the many so successfully owned and operated by Mr. M. J. O'Brien.

The planing mill is fully equipped with all the latest machinery for the manufacture of sash, doors, interior finish, and hardwood flooring, and is also equipped to take care of any orders for dressing-in-transit, for which purpose they have excellent facilities by both C. P. R. and G. T. R. An important advantage possessed by the mill is that all lumber used is taken from Mr. O'Brien's own limits at Calabogie, and sawn in the sawmill there. This mill is splendidly equipped with a modern band mill with a capacity of 100,000 feet per day, cutting spruce, hemlock, pine and hardwoods.

Renfrew Planing Mills Exhibit at Renfrew Fair.

At the beginning of shell box activities, the plant was immediately equipped with the necessary machinery and at the present time over sixty men are employed in the manufacture of shell boxes.

The plant possesses all facilities also for the manufacture of portable houses.

The Muskoka Wood Manufacturing Company

The Muskoka Wood Manufacturing Company, Huntsville, Ont., is one of the prominent woodworking institutions in northern Ontario, which has grown, within a short number of years, from a very small beginning to an industry on a par with many of the largest in older Ontario. The company have a large and well-equipped sawmill from which they can secure as much rough lumber as they may require for their woodworking business. In their woodworking factory they manufacture flooring, handles, dowels, chair parts and many other articles of woodenware, for the production of which they have excellent and extensive equipment. In recent years their plant has been greatly enlarged and improved. Their floor space has been more than doubled and they have added large dry kilns, storage sheds and

Canada Lumber Company's Yard, Weston, Ont.

modern equipment, both to their mill and factory. Their sawmill turns out about 6,000,000 feet per year and their other product is on the average as follows:—Dressed soft wood lumber and dressing-in-transit, 3,000,000 feet; hardwood flooring, 2,500,000 feet; lath 2,000,000 feet. The product of their plant also includes curtain poles, handles, chair parts, etc.

The power plant is a solid brick structure 40 x 40 feet, with Waterous boilers, carrying 125 lbs. of steam per square inch. The power developed is about 400 h.p. and is furnished by two Waterous high speed engines and one John Inglis automatic compound engine.

The dry kilns, one blast, and one natural draft, have a holding capacity of 150,000 feet.

A Busy Sudbury Company

The Evans Company, Limited, Sudbury, Ont., have built up, within a comparatively few years, one of the most important businesses in the north country. An interesting illustration which appears elsewhere in this issue shows the plant of the company, together with the office and stock sheds. It will be seen from this illustration that the company operate an extensive planing mill and a good-sized sash, door and cabinet factory, and that their equipment includes a large dry kiln. The plant throughout is equipped with the best and most modern types of machinery that can be procured. The company advise us that they could easily handle double the amount of work that is at present going through the plant, particularly in the line of transient dressing. In spite of the general falling off in trade during the past year, the Evans Company report that they are still enjoying a fair business, and that they have retained all of their regular staff of expert workmen.

The Laberge Lumber Company, Sudbury, Ont.

The Laberge Lumber Company Ltd., Sudbury, Ont., operate a large woodworking plant which is fully equipped with up-to-date machinery. The buildings consist of a solid brick factory 90 x 144 feet, an engine room 48 x 66 feet and a shavings vault 16 x 66 feet. The layout and equipment of the plant are shown by illustrations in this issue. The machinery includes one band resaw, one self-feed rip-saw, one double surfacer, one Berlin high speed matcher, one large moulder, one small moulder, one sash and door moulder, one swing cut-off saw, four automatic grinders, one Hanchett resaw filer, one chain mortiser, one sash and door relisher, one tenon machine, one double spindle shaper, two rip-saws, one dado machine, one lathe, one band saw, one three-drum sander and one arm sander.

Wilson Bros. Ltd., Collingwood, Ont.

Among the numerous industries of Collingwood, Ont., one of the most extensive and successful is that of Wilson Bros., Limited, who operate a large and well-equipped planing mill. Their plant is one of the finest in Canada and they have succeeded in working up a very extensive business. One of their specialties is the production of hardwood flooring, for which they are well known throughout Canada. Their equipment includes everything essential to the manufacture of high class sash, doors, frames, interior trim of all kinds, flooring, etc.

Dry Kilns at Wilson Bros., Limited Plant, Collingwood, Ont.

Another of their specialties is the production of veneer hardwood doors made to detail. The plant handles about 4,000,000 feet of hardwood and 2,000,000 feet of pine annually.

The plant consists of a large main building, dry kilns, storage sheds, drying houses, power house, etc., covering in all about six acres or two city blocks. The four dry kilns were furnished by Sheldons Limited, of Galt, Ont., and have a capacity of 250,000 feet. The company produce their own power from sawdust and shavings.

Opening for Wood Blocks in England

Encouraging Outlook for a Market for Canadian Goods —Important Details of the Trade

Mr. H. R. MacMillan, Special Canadian Trade Commissioner, in a recent report published in the Weekly Bulletin of the Department of Trade and Commerce, says:—Before the war, the quantity of timber used for wood block paving was increasing yearly. It is now in general use in nearly all of the several hundred boroughs whose population is greater than 60,000. Its growing popularity is due to the fact that it shows a longer life under motorbus traffic than any other smooth pavement that has yet been produced at equal expense, to the ease with which repairs may be made and to the absence of dust or noise.

There are a few prominent cities such as Glasgow, Dublin, Belfast, Liverpool, where wood-block paving is not used except in front of hospitals and schools. In these cities either granite sets are used, which may be laid at a cost, inclusive of all charges except foundation for $1.75 per square yard, and which last twenty years under very heavy traffic. When granite sets are in general use in a city, the introduction of the smoother and more noiseless wood paving is delayed by the method of shoeing the draught horses with sharp corks, which tear up the wood blocks.

Effect of the War

The quantity of timber used for paving in 1913 was approximately 60,000,000 feet. Since the outbreak of the war, work in paving has been postponed owing to the unwillingness of the local government board to sanction loans for this purpose. The few municipalities with money on hand for paving have found that the price of timber has increased, so that the cost of a 5-inch creosoted block pavement is greater than the cost of a 2-inch natural rock asphalt, a condition which has led to a greater proportion of asphalt being laid this year than is usually the case.

Many woods have been tried for pavements in the United Kingdom. Jarrah was introduced by a wealthy company, which put in timber yards and a paving plant, and was laid in large quantities. It proved unsatisfactory, wearing and breaking off at the corners and edges and producing a very rutty pavement. No Jarrah is laid in city streets now. Red gum from the United States was introduced in the same manner and gave poor service. Oak was used in the early years of wood paving, but its use was discontinued twelve years ago, on the ground of expense. Pitch-pine from the United States was also tried but it did not wear evenly and produced a rough pavement. Canadian white spruce was laid on the north side of Trafalgar Square in London twelve years ago, with an eight-pound treatment of creosote per cubic foot, and is yet in excellent condition. Without exception, the whole of the wood-block pavement laid in Great Britain now is Swedish and Russian redwood (Pinus sylvestris). The specifications issued by the municipal engineers throughout the country admit this wood and no other, the one exception being the specification for the borough of Westminster, London, which admits Canadian spruce, red-pine or Douglas fir.

Swedish redwood has three points in its favor, the price is satisfactory, its life is definitely known, and the paving companies handle it. Swedish and Russian redwood in normal times was delivered in 3-inch by 8-inch or 3-inch by 9-inch, 6 feet to 20 feet long, averaging 16 feet, dressed one side one edge for £10 10s. to £11 10s. per standard c.i.f. The price during the war has risen to £16 10s. per standard c.i.f.

This timber sawn into 4-inch blocks and given an 8-10 pound treatment of creosote will make a pavement lasting in London twenty years under light traffic and twelve years under heavy traffic. Large traffic in London is equal to heavy traffic in most Canadian cities. The cost of wood paving throughout the United Kingdom is therefore based on the purchase of a timber at about £11, a standard that will last twelve to twenty years, depending upon traffic conditions. The only wood yet known to meet these conditions is redwood. The municipal authorities when authorizing wood-block pavements in nearly every case specify redwood, and the paving companies do not handle any other kind of wood. The influence of the paving companies is all powerful in most of the municipalities, when a change of wood is to be considered. Only a few important municipalities purchase blocks or lay pavements. Nearly all the paving is done by companies, who contract with the municipality to manufacture the blocks, creosote them according to the municipal specifications, lay the pavement on the base prepared by the municipality and maintain it free of cost or for an agreed annual charge per square yard for a stated term of years. (This term depends upon the traffic and averages fifteen years). The cost of this service is usually nine shillings per square yard for a 4-inch block, with an 8-pound treatment, to 14s. per square yard for a 5-inch block with a 12-pound treatment. The cost of laying is 2d. per square yard. The cost of maintenance where the maintenance is undertaken by the municipality, is 10d. per square yard per year.

Prospects for Canadian Wood

The companies engaged in this paving business are few in number and have a monopoly of the field. They have established their reputations on redwood, are acquainted with it, and are interested in maintaining its use. The city engineers are willing to entertain and try new material, if it promises them a longer service or a lower initial cost. The four Canadian woods which could be introduced in the United Kingdom for paving purposes are Douglas fir, white spruce, jackpine, and redpine. These woods can only be introduced if they can be sold c.i.f. to the paving companies for, in normal times, less than £11 per standard for a well manufactured, sound grade, admitting tight knots not over 1½ inches in diameter, odd and even lengths accepted. The paving companies will then purchase the timber if the engineers will specify it. The two city engineers of Sheffield and Westminster have already signified their willingness to accept these woods, if the price is lower than redwood. Other city engineers are willing to have a trial strip of pavement laid in the city at a reduced cost or at least wish to be convinced that the new wood has already given satisfactory service in some municipality in the United Kingdom.

There is no opportunity for the shipment of creosoted blocks. Creosote costs only 6 cents a gallon at the creosoting works in England, and this fact alone prohibits the exportation of creosoted goods from Canada to England.

The specifications for blocks are not so rigid in England as in Canada. Hearts are admitted. Knots are admitted unless loose, or unless on the upper end of the block, and are sometimes accepted even then. There is no rigid adherence to any rule regarding the rate of growth. The Russian redwood is preferred to the Swedish because it is slower growing and therefore harder, but blocks are admitted with rings 6 or even 4 to the inch.

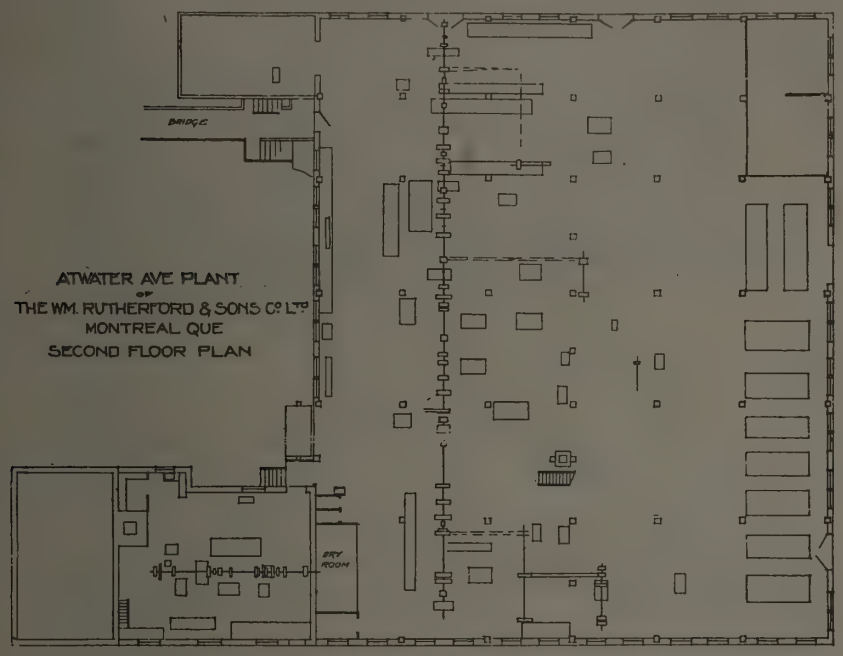
There is no rigid exclusion of sapwood, some specifications admit as much as 18 per cent. of saps.

If Canadian shippers of timber suited for paving can see their way to accept the prices suggested above, there will be a good future for Canadian timber in competition with European. The actual introduction of timber on a commercial scale will take place when one or more paving companies, through the lower price of Canadian timbers, see a larger profit in using it. This day may be hastened if those interested in selling the timber at this price arrange for at least one strip of sample pavement to be laid, preferably in the Borough of Westminster, London. This might profitably be done by those interested in the development of a market for Douglas fir, which should be able to compete with European paving timber, when the ocean rates again become normal.

Typical Quebec Province Woodworking Plants

William Rutherford & Sons Company, Limited, Montreal

Wm. Rutherford & Sons, Limited, Montreal, P. Q., are one of the most widely known manufacturers in Eastern Canada. Their yards, planing mill and general interior finish factory cover a very large area. The main building is three storeys high and in it the company employ some 500 men. A little distance from the main building, close to the lumber piles, is located the dry kiln, which is operated in two sections, the first for free steam and the second for dry heat. From the dry kiln the lumber is distributed to the moulding and planing mill, or sash and door department. The mill is equipped with the most modern woodworking machinery, including band saws, matchers, surface planers, dimension planers, rip saws and boring machines. Upon the ground floor of the main building are located the planing mill and the moulding departments, where numerous high speed machines are installed. Upon the second floor are located the glue room and press room for veneer work. On this floor also there is located the stair department, completely equipped with modern electrically-operated machinery, and the paint and finish shop. Power is secured from five boilers and a 250 h.p. engine. The machinery in the plant, which is all of the latest type, was supplied by the following firms:—H. B. Smith & Company, Smithville, N.J.; The Berlin Machine Works, Hamilton, Ont.; S. A. Woods Company, Boston, U.S.A.; Connell & Dengler, Rochester, N.Y.; McGregor, Gourlay Company, Galt, Ont.; E. B. Hayes, Oskosh, Wisconsin; Greenlee Bros., Rockford, Ill.; Robinson & Son, Rochdale, England.



The company always carry in stock large quantities of hard wood and several million feet of ordinary grades of lumber. The extent of the trade carried on by this company may be estimated from the fact that they carry in stock about 20,000 hardwood and softwood doors, in addition to large stocks of window frames, sash, cupboards, cabinets, stair work, posts, columns, mouldings, etc.

J. H. Gignac, Limited, Quebec, P. Q.

J. H. Gignac, Limited, Quebec, P.Q., a firm which had its origin in 1884, operates an extensive woodworking industry. The plant occupies an area of 119,000 square feet and includes extensive equipment for turning out a wide variety of finished products, including sash and doors, hardwood mouldings, show cases, office and store fixtures, church pews, school desks and benches, mantel pieces, and, in fact, anything that wood may be shaped into. In normal times the company employs between 400 and 600 men and there are no less than 134 machines in the plant.

The location of the plant is convenient for making shipments to all parts of Canada, and would be convenient also for shipments to Europe. The plant is located alongside the C. P. R., Quebec-Montreal line, with which it is connected by a private siding, as well as with the Canadian Northern and the Quebec and Lake St. John lines. Close to their main property, the company own a wharf frontage of 705 feet. The plant is operated by 200 h.p. steam engines, burning sawdust and shavings. The equipment of the plant also includes a modern dry kiln. In fact the facilities which the company have, both for manufacturing and shipping, enable it to cater successfully to an enormous market.

In connection with this firm, and of special interest in regard to the subject under discussion, is the part which it has played in the development of Canadian trade, both at home and abroad. The firm's favorite maxim is "Patronize Home Products." In order to advertise Canadian lumber products, it has done much, by means of exhibits both at home and abroad, to bring these products to the attention of buyers in many parts of the world. As far back as 1884 its products won a first prize and medal at the Antwerp exhibition. This was followed in 1886 at the Colonial and Indian Exhibition in England, where the firm was awarded a diploma and gold medal. During the past 25 years the company has been a constant exhibitor at Quebec provincial exhibitions, where its attractive display, always on an extensive scale, has been instrumental in developing a widespread trade.

E. T. Nesbitt's Plant, Quebec, P. Q.

E. T. Nesbitt, Quebec, P. Q., operates an extensive planing mill, in addition to his sawmill and lumber yard business. Mr. Nesbitt established his business in 1884, and it has been growing steadily ever since. Early in 1914 he moved to a more extensive site and erected a well-equipped plant, comprising a saw and planing mill, sash and door factory, box making plant, moulding shed, lumber sheds and fireproof dry kiln. These buildings are equipped with the very latest machinery and appliances.

The equipment of the planing mill includes the following:—one 55-in. Berlin matcher; one lightning flooring machine, one Champion matcher; one 24-in. endless bed planer; one self-feed rip saw; one 36-in. McGregor-Gourglay circular resaw; one Berlin 8-in. band resaw. These machines are installed on a bed of reinforced concrete 14 inches thick, 13 feet wide and 80 ft. long, thus doing away entirely with vibration. The large Berlin band saw is also set upon a concrete foundation 5 ft. 6 in. deep.

In the sash and door factory the following machines are in use:—one 43-in. Berlin three drum sander; one 12-in. buzz planer; one 24-in. endless bed planer; one tenoning machine; one chain mortiser; one butting saw bench; one spindle shaper; one 36-in. band saw; one mortiser and relisher; one blind slat tenoning machine; one boring machine; one wood-turning lathe, one arm sanding machine, one clamp bench—all furnished by the McGregor-Gourlay Company.

Sander at work—E. T. Nesbitt plant, Quebec.

In the sticker room the equipment includes, one 8-in. 4 sided

moulder; one 6-in. 3 sided moulder; one iron rip saw table—all furnished by the McGregor-Gourlay Company. The planing machinery is installed in a large lumber shed 200 feet by 110 feet, which also contains concrete dry kiln 45 ft. long, 20 feet deep and 9 ft. high. The whole plant covers an area of 200,000 square feet. Power is furnished by a battery of 3 boilers and a 200 h. p. engine, also an auxiliary engine of 75 h. p. to provide against possible break downs. The company carry on hand a complete stock of about 3,000,000 feet of lumber and they handle about 7,000,000 feet a year, a large portion of which is manufactured into doors, sash, frames, interior finish, mouldings, boxes and matched lumber.

Well-Equipped and Anxious for the Business

John Fenderson & Company Inc., who carry on extensive lumbering operations in the province of Quebec are exceptionally well equipped at Sayabec, P. Q., for the production of war order goods such as portable house material. Although they could not fill orders for portable houses, sash or doors, they have splendid facilities for supplying large quantities of flooring, ceiling, partition, casing, base, etc. They have one of the largest and best equipped planing mills in eastern Canada, at Sayabec, and can easily supply 100,000 feet per day of dressed products such as those referred to above, in addition to taking care of their regular domestic trade. Furthermore, they carry at all times a stock of dry spruce lumber sorted to various thicknesses, widths and grades and each sorting piled separately, the whole amounting to about 40,000,000 feet. They are also in a position to supply a very large amount of resawed stock as they have nine resaws in their plant.

Planing Mill and Resawing Plant,—John Fenderson & Co., Inc., Sayabec, P.Q.

The planing mill operated by this company at Sayabec, P. Q., has a dressing capacity of 200,000 feet per day and they have a resawing capacity of 225,000 feet per day. The plant is fully equipped in both the planing mill and the resaw mill with the latest heavy duty fast Berlin machinery. Their flooring product is thoroughly kiln dried, side and end matched, backed out and bored for blind nailing. The plant derives its power from four 150 h.p. Robb boilers and one 500 h.p. Robb engine. The plant was established about fifteen years ago and the equipment has been kept thoroughly up-to-date ever since.

At Sayabec, P. Q., the firm are located on the Intercolonial Railway and can make deliveries at Montreal, St. John, Halifax, Campbellton, N. B., and Dalhousie, N. B. It will be seen from the above material that they are in an exceptionally advantageous position for furnishing material of the above kinds at reasonable prices. Like every other plant in Canada they would appreciate greatly an opportunity of quoting on any business which may develop.

Interior of plant—John Fenderson & Co., Inc., Sayabec, P.Q.

Canadian Car and Foundry Plant, Turcot, P. Q.

Some of the largest plants in Canada engaged in woodworking operations are those employed in the construction of cars for railway companies. While these are not in the same class as the ordinary woodworking establishments, they are well equipped for turning out an enormous production, and naturally, with parts of their equipment idle, they could play an important part in the production of extensive orders for manufactured wood products which may be needed in Europe after the war. One of the most important companies in this class is the Canadian Car and Foundry Company, Limited, with head office at Montreal and works in various parts of the country. One of their largest plants is at Turcot, just outside of Montreal. At this plant the company have excellent shipping facilities for the reception of their lumber, of which an average stock of between 7,000,000 and 8,000,000 feet is kept. The lines of the Grand Trunk and Canadian Pacific Railways both come into the plant. The Lachine canal also furnishes additional shipping facilities by water. Two large dry kilns are operated at this plant. The larger one, near the planing and matching mill, is equipped with 12 tracks. Lumber is placed upon transfer trucks which are run into the kilns and taken out on the other side when the stock has been dried. The planing and matching mill is divided into two sections, one for heavy work and the other for light work. In each section there are two 7½-ton over-head cranes, permitting the lumber to be handled easily. The machines in the planing and matching mill include sizers, cut-off saws, tenoner and coper, four spindle horizontal car mortisers, gainers, single-feed rip-saws, matchers, 5-in. band rip saw, planer, 3-in. band saw, four butting saws, buzz planer, shaper, combination saw and swing saws. The plant also includes a mill for the building of box cars, containing machinery for the production of siding, lining, flooring and roofing.

The interior woodwork is manufactured in the cabinet shop, consisting of a ground floor and one upper storey. In this department the very finest class of woodworking is carried on, the equipment includes cut-off saws, buzz planers, pony planers, stickers, band saws, rip saws, chain mortisers, chisel mortiser, and borer, horizontal mortiser, spindle shapers, surface moulder, combination saws, double head tenoner, gig saw, drum sanders, scraper and toother, spindle borer, belt sander, etc.

All the shavings and sawdust produced in the operation of the machines is conveyed to the power house by means of a blower system, and is there utilized as fuel. The plant is operated by electricity, individual motor drive being used. The company have their own power and lighting plant.

This company are at present working upon large contracts for the production of shell boxes.

The C. P. R. Shops at Angus, P. Q.

The Canadian Pacific Railway in its Angus shops at Montreal gives employment, during normal times, in the car building departments, to about 4,000 men. The company operates an immense woodworking plant at this point. The shops, including the locomotive departments, cover 30 acres of ground. Each month, the company uses in the neighborhood of 6,000,000 feet of lumber and turns out, in round numbers each year, 20,000 vehicles of every description. In one year the consumption of lumber at the Angus shops is approximately 45,000,000 feet. The car building processes are carried on in several shops, grouped at one end of the plant. They are divided into two sections, one for passenger car work and the other for freight car work. The lumber is stored in an extensive yard, with rail connections to permit of easy loading. Adjacent to the yard is the planing mill and sawing mill. All the heavy work is done in this mill. Rails are laid down at each side of the mill so as to facilitate the handling of the lumber. All the machines throughout the plant are driven by electricity. The equipment in the passenger car department includes planers, borers, mortisers, cut-off saws, etc., which are operated upon the heavy lumber. The lighter stock is prepared in the cabinet shop, a two-storey building, with an extensive equipment, including several sanders, a Linderman dovetail glue jointer, marqueterie saws, veneer jointer, mortisers, band saws, clamps, etc.

In the freight car department the equipment is largely similar to that in the passenger car department. All the shavings in these mills are conveyed by blowers to the power house and fed to the boilers.

The lumber for flooring and heavy sheathing comes direct from the kilns, on rails, to the matchers and cut-off saws and proceeds then to the erection shop. The kilns connected with this department are separate from those used in drying hardwood, and are located conveniently close to the planing mill.

Maritime Province Woodworking Industry

Rhodes, Curry Company's Plant, Amherst, N. S.

In the Planer Room—Rhodes, Curry Company, Limited, Amherst, N. S

The Rhodes, Curry Company, Limited, Amherst, N.S.

The Rhodes, Curry Company, Limited, Amherst, N. S., operate one of the most extensive woodworking plants in Eastern Canada. The company was established in 1877 as a woodworking business, at Amherst. This business was continued until 1893, and building and contracting operations were also carried on by the company. In the latter year, and in 1909, the company joined forces with large car manufacturing companies and extended their business greatly. The woodworking and contracting business is still managed under the name of the Rhodes, Curry Company, Limited. The main plant is located at Amherst, which, with water and rail facilities, is extremely well adapted for the collection of raw material and the distribution of its products. In addition to the plant at Amherst, the company operate branches at Halifax, Sydney and New Glasgow. Their products comprise building materials of every description, also church, school, bank and office furniture, and their markets have been extended, not only through Eastern Canada, but into important export countries, even as far as the interior of South Africa. As a feeder to their factory and yards, the company carry on large lumbering operations, so that they are in an exceptionally favorable position for turning out large quantities of finished products without delay. Within the last year, the woodworking factory at Amherst has been extended over 400 feet. New machinery has been installed, and new dry kilns have been built with a capacity of 6,000,000 feet per annum. Additional sidings have been laid; steam heated warehouses have been erected to take care of the finished product, and every modern convenience has been adopted for handling an increased output.

The company cut from their own timber limits anywhere from three to ten million feet annually. In matched spruce flooring, roofing and sheathing they have a capacity of 30,000 feet per day. In their dry kilns, the company have facilities for handling about 6,000,000 feet per annum. During the present year they have been shipping thirty cars a month of manufactured materials made at their plant, exclusive of air dried lumbers.

The Bathurst Lumber Company, Bathurst, N.B.

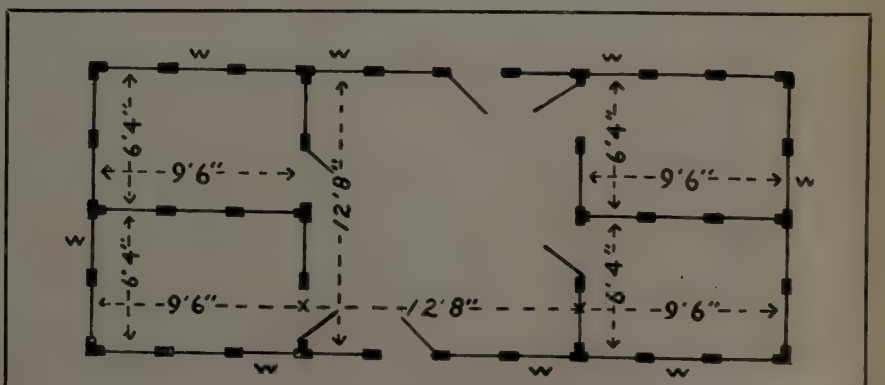
At Bathurst, N. B., there is located one of the most extensive and well-equipped saw and planing mill businesses in Eastern Canada, operated by the Bathurst Lumber Company Ltd., under the management of Mr. Angus McLean. This company has undergone remarkable expansion of late years. The planing mill operated by the company, which was recently constructed, is located on the main line of the Intercolonial Railway, just outside the company's lumber yard, with a siding running into the plant. This enables the company to handle lumber from the railroad cars into the mill, and from the mill into cars at the lowest possible cost. The planing mill building is 100 feet long and 63 feet wide, and is covered with steel. Its equipment includes: one 60-in. Mershon band resaw, one 50-in. Mershon band rip saw, one S. A. Woods fast feet matcher, one S. A. Woods fast feed double surfacer, one Hoyt matcher for hardwoods, and one Berlin moulder, also two additional fast feed matchers installed since the plant was first opened. At the outset the plant had a capacity of 5 to 6 car loads of dressed stock per day.

The whole mill is operated by electricity, each machine having a separate motor. The fast feed planer and matcher, No. 404, 15 x 6 in. referred to above, which was furnished by the S. A. Woods Machine Company, Boston, Mass., is equipped with the Woods patented double profiling attachment and is capable of matching stock or dressing sidings of any commercial pattern, up to 300 lineal feet per minute. The machine is fitted with patented automatic feeding table, so that the lumber can be fed in continuously without difficulty, at 200 feet per minute, or faster if necessary.

The fast feed double surfacer No. 450, 24 x 6 in. which was also furnished by the S. A. Woods Company will work up to 200 lineal feet per minute and is used for surfacing one or two sides. Its capacity is similar to that of the No. 404.

Murray & Gregory, St. John, N.B.

Murray & Gregory, Limited, St. John, N.B., one of the largest manufacturers of wood products in Eastern Canada, are as well fitted as any company in Canada to handle wood goods orders which may arise out of the demand created by the war. This company have long specialized in portable houses, in fact they are the originators of the portable house in their part of the country. They have built and supplied large numbers of these buildings. In fact, they have the facilities for building or assembling portable houses on a large scale. In the first place, they have their own sawmills from which they can secure at all times such schedules of lumber as they may require for work of this kind. In their factory at St. John, they are equipped with every class of machinery required for the drying and dressing of all construction material. Moreover, they own 15 to 20 acres of land adjoining their plant, which would be an important factor in enabling them to handle large orders promptly. At all times, the company have on hand immense stocks of dry lumber, so that they can commence work upon large orders without a moment's delay.



P of Five-Room Portable House—Murray & Gregory, St. John, N.B.

Their shipping facilities are of the very best, both by water and by rail.

The company could turn out probably about one portable house per day, with their present equipment. Their spruce and pine lumber are particularly well suited for portable houses. They will stand a great deal of handling, a feature which would be of the utmost importance in connection with houses that would probably be taken down and carted from one place to another. The company's plant is very close to West St. John, from which shipments of stock for foreign orders would be made.

Murray and Gregory, Limited, have designed a number of excellent portable houses, for which they have found quite an excellent sale. These are arranged according to various plans and are for one, two, three, four and five roomed buildings. The plan of one of their five-room buildings is reproduced elsewhere in this issue.

This company have already done a large export business with Great Britain for many years and are therefore closely in touch with all the details connected with such trade. They would thus be in an excellent position for handling such business as may develop out of the war.

Hillsboro Manufacturers of Semi-Ready Houses

The Hillsboro Woodworking and Manufacturing Company, Limited, Hillsboro, N.B., in addition to carrying on a large business in the production of all kinds of doors, sash, flooring, interior trim, and other building material have specialized in the production of "semi-ready houses."

Their machinery building is 40 x 80 feet. Their power house, which is built of stone, is 25 x 45 feet, and their dry house is 25 x 100 feet. Their power is derived from natural gas, while the waste from the plant is burned under a boiler to provide heat for the dry house. The company are in a position to procure practically unlimited quantities of spruce and hardwood at reasonable prices, and their facilities for turning out portable houses are of the very best.

The equipment in their plant includes one planer, one power splitter, one cut-off saw, one cabinet table saw, one buzz planer, one tenoner, one mortiser, one turning lathe, one arm sander, one disc sander, one boring machine, etc. With their present equipment they can easily turn out two portable houses 20 x 30 feet a week, but if urgent orders were received they could put on a larger staff and their output would only be limited by the capacity of their dry house, which could be fitted to handle 50,000 feet per week. At present this company is one of the fortunate ones which have secured orders for shell boxes, and they are busy upon a contract for 20,000 of these.

An Important New Brunswick Company

One of the most modern woodworking plants in Canada is that of the Sussex Mfg. Company Ltd., Sussex, N. B. This company draws its raw material from its own extensive timber limits, and conducts a large lumber manufacturing business, and modern woodworking business. They are extensive manufacturers of refrigerators, and also do a great deal of special furniture work, in addition to turning out a complete line of house finish. They expect to be in a position next season to turn out large quantities of house finish for export. Recently they have secured a substantial order for shell boxes, which they expect to have completed before the end of the year.

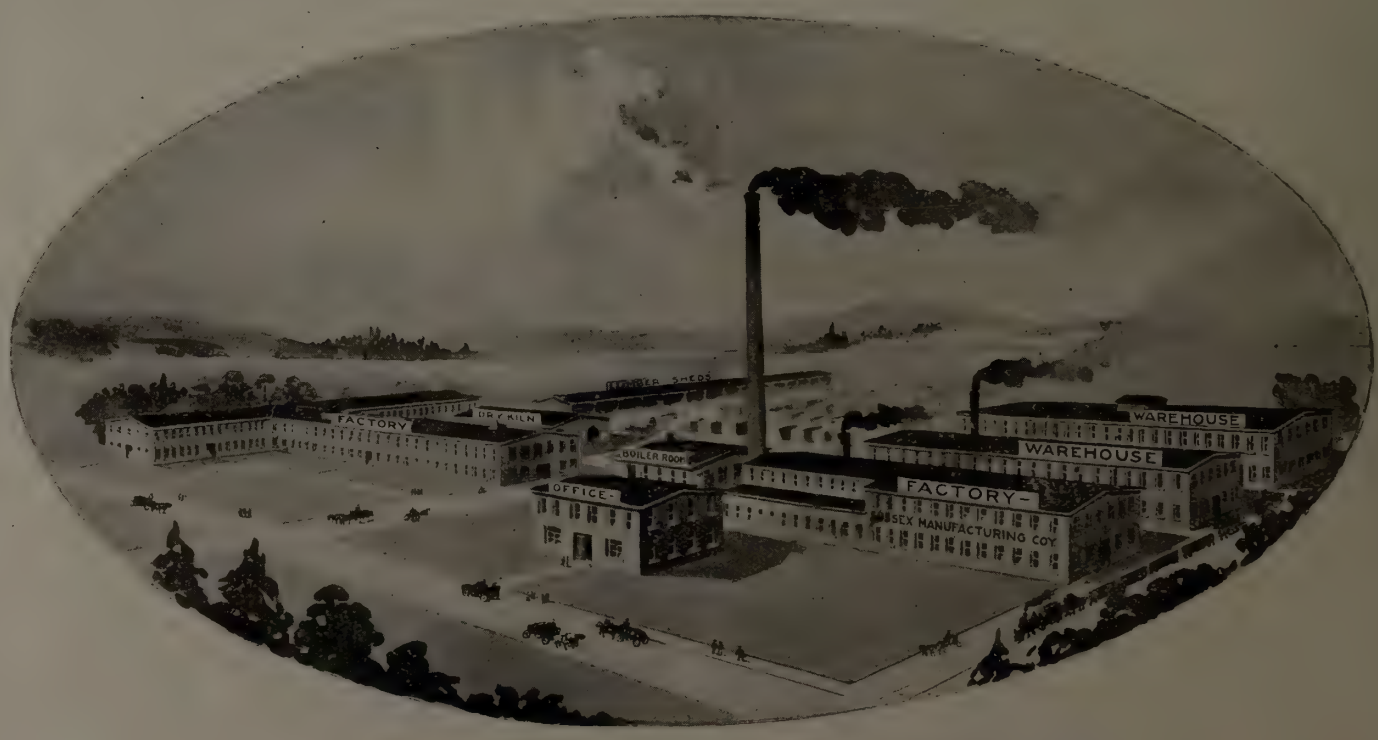
The equipment in the woodworking plant of the Sussex Manufacturing Company, Limited, includes the following:—one large S. A. Woods planer and matcher, one 10-in. four side moulder, one 8-in. four side moulder, one revolving bed single surfacer, two pony planers, one heavy rip saw, one heavy band re-saw, two cut-off saws, three jointers, two tenoning machines, three mortising machines, one iron table shaper, one band saw, five saw tables, two boring machines, one two-drum sander, one disc sander, one open drum sander, one sash and door clamp, one foot trip cut off saw, one sash sticker, one oak surface machine, one scroll saw, one wood lathe, three emery grinders and saw sharpening machine, as well as a tinsmith equipment, which consists of tin rolls, foot trip set, shears, folders, etc.

In connection with the woodworking plant they have a large machine shop, the equipment of which includes several iron lathes, wood lathes, radial drill, press drill, shaper, miller, key slothes, pig shear, big planers, band saw, forge, iron rolls, cold blast forge, hack saws, threader and clipper and presses.

The company also own and operate the electrical plant for the town of Sussex, so they are running practically twenty-four hours a day the year round. They manufacture between 2,000,000 and 3,000,000 feet of lumber a year, and in the woodworking line they turn out a large number of refrigerators, as well as special furniture and a complete line of house finish. They have shipped some of their product, such as refrigerators, to all parts of Canada, and also to the Argentine Republic and the West Indies. They have been receiving a good business during the past year also from South Africa.

Damien Lalonde Limited, Montreal

Damien Lalonde, Limited, Montreal, P.Q., manufacturers of sash and doors and general woodwork, operate an extensive plant, recently constructed. Their mill site is 155 x 90 feet, well lighted on all four sides. The mill building consists of a ground floor and first storey, and the equipment includes the very latest for woodworking operations. Among the machines on the ground floor are the following:—McGregor-Gourlay band saws, planer, matcher, rip saw, moulding and clapboard machine, one 94 Berlin matcher, operating at 150 feet per minute. The dry kiln is also located on the first floor and is so arranged as to permit of the lumber being loaded from the yard on to trucks, which run on rails into the kiln. When the lumber passes through the kiln it is pushed, still on the rails, into the planing and sawing room. The top floor is devoted entirely to woodworking operations. The equipment includes cross cut saw, moulder, buzz planer, sash sticker, jig saw, borer, mortisers, shapers, band saws, etc., supplied by the Berlin Machine Works, the McGregor, Gourlay Company and Cowan & Company, also a double tenoning machine, supplied by the E. B. Hayes Machine Company. The company have excellent shipping facilities, furnished by a C. P. R. siding running alongside their mill.



Sussex Manufacturing Company's Plant, Sussex, N. B.

Campbell River Lumber Company's Planing Mill, White Rock, B. C.

Campbell River Company's Electrically-Driven Mill

The Campbell River Lumber Company, Limited, White Rock, B. C., who operate a fine sawmill and five shingle mills, also have an excellent planing mill fitted with modern machinery. The planing mill building is 100 x 100 feet, two storeys with cupola. The equipment is all driven by electricity.

Terminal Construction Plant, Vancouver, B. C.

One of the most modern and up-to-date woodworking plants in British Columbia is that of the Terminal Construction and Mfg. Company Ltd., Vancouver, B. C. The plant is equipped with over 40 of the latest models of woodworking machines, together with numerous smaller devices. The department devoted to cabinet work occupies a floor space of 13,600 square feet. Every machine in the building is equipped with the vacuum system for carrying off all the sawdust and shavings. This plant was completed in 1912 and since then the company has worked up a splendid business, shipping material to all parts of British Columbia, Alberta, and Saskatchewan. The company has over 600 feet of railroad siding, large storage sheds, ample dry kiln capacity and every mechanical facility for the production of good work on a large scale.

A Large British Columbia Plant

The plant of the British Canadian Lumber Corporation, Limited, New Westminster, B. C., includes an electrically equipped planing mill, 196 x 168 feet, situated about 250 feet west of the main building. The planing mill is one storey, with cupola roof. The equipment includes about 18 machines of the most modern type, all connected with individual motors. These modern dry kilns are erected close to the planing mill. Large dry sheds are also close by, with ample accommodation for storage of finished materials.

Interior view of British Canadian Lumber Corporation's Plant, New Westminster, B. C.

The McLelan Lumber Co., Ladner, B. C.

The McLelan Lumber Company, Ladner, B. C., operate, in addition to their sawmill, a planing mill 40 x 60 ft., the machinery in which is all driven by electricity. The equipment of the plant includes one Berlin No. 91 fast feed planer; one Berlin No. 108 inside moulder; one Berlin self feed rip saw; one 60-in. Mershon resaw; one 48-in. three drum sander, and four swing cut-off saws. These machines are all driven by individual motors varying in size from 1 h.p. to 50 h.p.

The Thurston-Flavelle Plant, Port Moody, B. C.

One of the most important and interesting industries at Port Moody, B. C., is that of the Thurston-Flavelle Lumber Company, who operate both a large sawmill and a planing mill. Much of the high grade product of the sawmill is passed through dry kilns, four in number, and sent to the planing mill. The planing mill is equipped with the most modern machinery. On account of the lumber manufacturing facilities of the sawmill large quantities of raw material are always available for the planing mill. The sawmill has a daily capacity of about 50,000 board feet of lumber.

E. H. Heaps & Company's Plant, Vancouver, B. C.

One of the most efficient and extensive sawmill and planing mill operations in British Columbia is that of E. H. Heaps & Company, Vancouver, B. C., which at present is being managed by Mr. A. W. Stevenson, the receiver. The planing mill is equipped in the most modern manner and is operated by electricity. The matchers, moulder, sticker and cut-off saws are direct connected. The following table shows the capacity and type of motors and the machines which they drive:—

H.P.	R.P.M.	Type	What Drive
75	800	Squirrel cage	Blower fan.
50	1200	Squirrel cage	6 x 15 matchers.
40	1200	Squirrel cage	6 x 15 matchers.
40	1200	Squirrel cage	Berlin resaw.
30	860	Squirrel cage	15-in. wood moulder.
30	850	Squirrel cage	12-in. sticker.
10	1200	Squirrel cage	Rip saw.
5	1200	Squirrel cage	Grinding machinery.
3	1800	Squirrel cage	Swing cut-off saws.
1	1800	Squirrel cage	Knife grinders.

The planing mill has a capacity of from 150 to 200 cedar doors per day. It has also the very best facilities for shipment by land and water, by means of the C. P. R. tracks to the south of the plant, and Burrard Inlet to the north. The sawmill, which is not running at present, has a capacity of from 50,000 to 75,000 feet per day. This plant is one of the many plants in Canada which have been obliged to shut down a large portion of their capacity, on account of the falling off in trade resulting from the war. The whole plant would be available in case of an urgent demand developing out of the rebuilding of the war-devastated areas in Europe. The receiver for the company is hopeful that this will be the case and that the revival of trade will induce some successful operators to take over the plant and put it all again in the producing class.

The Columbia River Lumber Company's Plant, Vancouver, B. C.

The Columbia River Lumber Company, Limited, large manufacturers of lumber at Golden, B. C., operate also an extensive planing mill, situated a short distance away from their mill. The planing mill is equipped with a number of fast feed machines of the latest design.

Dry Kilns—British Canadian Lumber Corporation, New Westminster, B. C.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Slabs and Edgings

Slabs and Bundled Edgings, Hardwood and Softwood. Quote cash prices. Box No. 248, Canada Lumberman, Toronto, Ont. 19-22

Wanted

Lumber in exchange for new modern six-roomed houses, centrally located in Toronto. Write Box 254, Canada Lumberman, Toronto, Ont. 21

Wanted

100,000 Cedar Ties.
1½ in. and 3 in. Maple, Beech and Birch Lumber.
2 and 3 in. Soft Elm, 2 in. Rock Elm.
Dry or new cut. State quantity you can supply, and when.
Box 250, Canada Lumberman, Toronto, Ont. 21-24

Wanted

Small block of 1 in. and 2 in. Spruce, also small block of 1 in. or 2 in. Hemlock.
Write with list.
The Elgie & Jarvis Lumber Co., Ltd.,
21 18 Toronto Street, Toronto, Ont.

Wanted Lumber

Soft Elm, 1½ in., 2 in., 2½ in., 3 in., 3½ in., 4 in.; also Birch 1 in. and 1¼ in. Describe fully with lowest cash prices to Standard Hardwood Lumber Company, Owen Sound, Ont. 19-t.f.

Wanted Lumber

Quotations wanted on the following Canadian woods:—in 1 x 4 in. and up random lengths, log run mill culls out: Ash, Birch, Basswood, Elm, Oak, Poplar, Tamarac, Pine. Quantity required to depend to a large extent on price.
We have on hand a large quantity of 10 x 10 and 12 x 12 in. hemlock, please ask for prices. Address Box 251, Canada Lumberman, Toronto, Ont. 21

For Sale–Lumber

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale– Lumber

75,000 ft. to 100,000 ft. Hemlock Timber, Dry. From 8 x 8 to 12 x 12, from 10 ft. to 22 ft. long. Attractive prices for immediate shipment. Write Box 264 Renfrew, Ont. 21

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

Lumber For Sale

1 in., 1¼ in., 2 in. and 3 in. Spruce.
1 in., 1¼ in. and 2 in. White Pine.
Widths separated.
5/4 in. and 1 in. Crating for prompt shipment.
The Elgie & Jarvis Lumber Co., Ltd.,
21 18 Toronto Street, Toronto, Ont.

For Sale

700,000 ft. 3-in. Hard Maple, No. 3 common sound hearts, 6 in. and wider, band sawn, good stock, dry.
400,000 ft. 6/4 Maple, No. 1 and 2 common, dry. Address Box 256, Canada Lumberman, Toronto, Ont. 21-22

For Sale by Tender

The Undersigned has been instructed to offer for sale by Tender, the following: property of The W. A. MOORE CO., LIMITED, in Liquidation, Meaford, Ont.

BLOCK 1.—Factory Site, Plant and Equipment, fully equipped and in good working condition for the manufacture of Wood Mantels and other wood specialties. $16,000.00

BLOCK 2.—289 Wood Mantels, 7,500 ft. Hardwood Lumber, Veneers, Cuttings, Mouldings, Finishes, Oils and Repair Materials. $3,102.00

TENDERS for the purchase of the above will be received till noon, November 10, 1915.

Tenders must be made for each block separately, and will be received for one or both blocks and to be accompanied by marked cheque, payable to undersigned for 5 per cent. of the amount of Tender, a further sum equal to 10 per cent. shall be payable on acceptance thereof, the balance of purchase price on or before December 10th, 1915, when sale is to be closed.

The highest or any Tender will not necessarily be accepted.

For further particulars and specifications, apply to the Undersigned.

Dated this 20th day of October, 1915.

G. T. BISSELL,
21 Liquidator.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.

Minimum charge 25 cents

Accountant and Bookkeeper, several years' practical experience in Wholesale and Manufacturing Lumber business, desires position, familiar with modern office routine and management. Box 255, Canada Lumberman, Toronto, Ont. 21

Lumber grader and shipper, single, 24 French and English, three years' experience in softwoods and hardwoods, used to handling crew; wants position anywhere. Write Box 252, Canada Lumberman, Toronto, Ont. 21

Woods superintendent wants position, twenty years' experience with teams and railroad equipment of all kinds. Pine, Hemlock and Hardwoods. All kinds of ground. Will go any place. Can furnish good references. G. O. Sharp, Reynoldsville, Pa. 19-22

All-round lumberman, 25, wants position. Perfect French and English; Shorthand and Typewriting; Invoicing, Time-keeping for costs. Successful timber-tract estimator. Thoroughly understands grading of all woods. Six years solid experience in handling help. Now superintendent of mill employing one hundred men. Cause for change: employers discontinuing business. Will go anywhere. Write Box 253, Canada Lumberman, Toronto. 21

For Sale–Machinery

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26 in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Machinery For Sale

A Double Surface Planer and Matcher; power feed rip saw; four-side moulder; vertical boring machine.

A. J. LINDSAY,
92 Pembroke Street,
21 Toronto, Ont.

For Sale

Log Hauler, built by Alex. Dunbar & Sons; also several sets of sleighs. Address:

DENASTON BREAKEY,
Breakeyville,
21-24 Co. Levis, P. Q.

Rebuilt Veneer Machines

We have the following rebuilt veneer machines ready for immediate shipment.

1 Coe Lathe, 50-in. swing, 88-in. knife, 6-in. spindles.
1 Coe Lathe, 50-in. swing, 64-in. knife, 5-in. spindles.
1 Coe Lathe, 50-in. swing, 76-in. knife, 6-in. spindles.
1 Coe Lathe, 42-in. swing, 60-in. knife, 3¼-in. spindles.
1 Coe 100-in. Power Clipper.
1 Coe 54-in. Power Clipper.
1 Coe Type A. Stamper.

These machines are decided bargains and carry the same guarantee as we give our new ones. Prices on application.

THE COE MFG. COMPANY,
Painesville, Ohio.

Business Chances

Boxwood Opportunity

Responsible man with mill and abundance of raw material wants market with small advances to assist making Pickets, Lath and Boxwood Lumber No. 1.
21 Box 267 Thessalon, Ont.

Miscellaneous

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

Saw Mill Machinery For Sale

Sawmill near Sellwood, Ontario, daily capacity 60,000 feet. All machinery including.—Log Ladder, Bullwheel, Steam Kicker, Log Loader, Stationary Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8 ft. Double Cutting Bandmill, Cast Iron Lumber Table, 5-Saw Slab Slasher, 48-in. Big Champion Edger, Trimmer, Transfers to Edger and Trimmer Tables, Sorting Tables, etc. Also, Independent Lathmill, Filing Room Outfit and Power Plant complete. This machinery is of the latest design, practically new and in excellent condition. Offers will be accepted for all or any part of this machinery, where it stands or F.O.B. cars Sellwood.

The Waterous Engine Works Company,
22-t.f. Brantford, Canada.

Appealing for Canadian Lumber

While France purchased Canadian goods to the value of $4,000,000 the year before the war, she purchased last year from this country goods for which she paid $25,000,000. This was a point made by Consul-General Bonin, of France, in an address recently at the first annual meeting of the French-American committee, which was formed at Montreal a year ago, and has worked in connection with the national relief committee of France in gathering and forwarding to Paris supplies for the destitute refugees.

The report of the chairman, Senator Dandurand, said that the committee has sent to Paris during the past autumn and winter over 2,800 cases of woolen goods and about 500,000 francs in money, as well as 24 motor cars.

Continuing, the report said:

"A special demand was made to us for wooden shelters. An association was formed in Great Britain this summer, called "The Friends," which strives to build up in the ravaged districts in France some temporary lodgings. The French relief committee has asked us if Canada, which has such rich forest resources, could not help in that direction. We have prepared a plan which we have submitted to the federal government, wherein each timbered province would be asked to do its share. This act of generosity would at the same time remind the European countries, which will be in such need of the lumber after the war, of our inexhaustible forest resources. We are in hopes that a favorable answer will come from our governments."

New Brunswick Lumbermen Meet

A conference of lumber operators from all parts of New Brunswick was held recently at St. John. The possibilities in the lumber market and the extent of the season's cut were diseussed, but no definite conclusion was arrived at. Nothing was given out after the conference, but it is generally the impression that the operations this year will be dwarfed somewhat by the combined effects of high shipping rates, a plentiful supply on hand and the poor inducement in foreign markets. Among those who attended the meeting were W. B. Bentley and Herbert Jackson, St. Martins; John Kilburn and J. A. Morrison, Fredericton; L. J. Tweedie, Chatham, as well as others from the North Shore and a number from St. John.

SALE
of
Valuable Timber Limits, Mill Site, Plant and Equipment

There will be offered for sale, by Public Auction, in the Rotunda of the Royal Alexandra Hotel, in the City of Winnipeg, in the Province of Manitoba, on

Saturday, the 15th Day of January, 1916,

at the hour of eleven o'clock in the forenoon, the following property, namely:—

TIMBER BERTH LICENSE covering TIMBER BERTH No. 1000, containing an area of 4.88 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 1001, containing an area of 6.05 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 1002, containing an area of 3.11 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 571, containing an area of 4.75 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 551D, containing an area of 18 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 981, containing an area of 45.77 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 960, containing an area of 49.61 square miles more or less;

SCHOOL LAND TIMBER BERTH PERMIT covering TIMBER BERTH No. 146, being part of Section 11-44-8 West of Second Meridian in Saskatchewan.

EAST HALF of SECTION 7-45-7 West 2nd in Saskatchewan, excepting a right of way of 6.02 acres more or less;

Together with Saw and Lath Mill Buildings, Dwelling Houses, Office Building, Cook-house, Warehouse, Stable, Round House and other buildings situate thereon; also extensive Logging, Lumbering and other machinery, equipment and plant in connection therewith; also certain railroad plant, equipment and rolling stock suitable for use in connection with the above lumbering plant and timber berths.

The above properties are situate at or near Prairie River in the Province of Saskatchewan, with the exception of Berths Nos. 571 and 551D, which are situate near Dauphin in Manitoba.

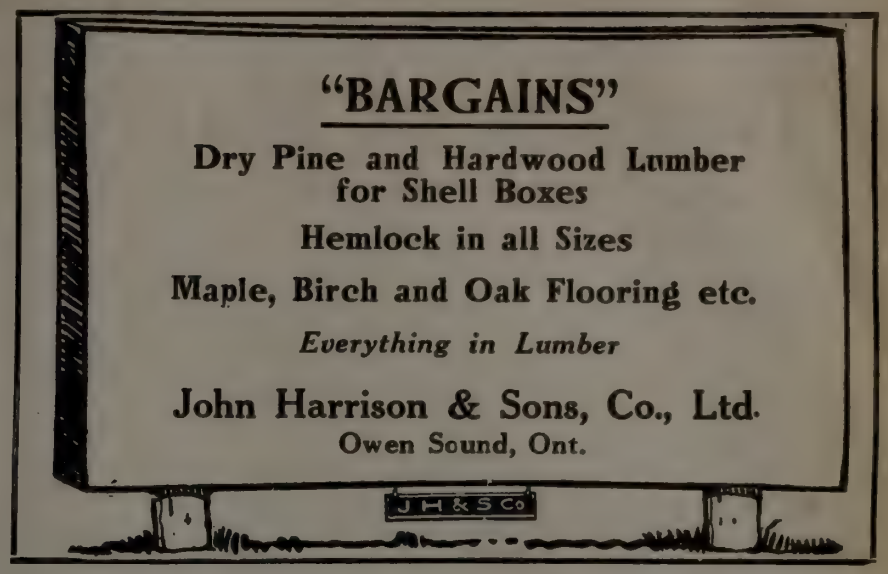
The above properties will be offered subject to reserve bid, and will be offered in bulk or in parcels as the Vendors may decide at the time of sale.

TERMS OF SALE.—Ten per cent. of the purchase price to be paid in cash at the time of sale, and the balance in accordance with the terms and conditions to be made known at the time of sale.

For further particulars, apply to:—

JAMES SHAW or THOMAS SHAW,
Dauphin, Manitoba
or to J. H. NEEVE, 363 Main Street,
Winnipeg, Manitoba

Dated this Twenty-first day of October, 1915.


"BARGAINS"
Dry Pine and Hardwood Lumber for Shell Boxes
Hemlock in all Sizes
Maple, Birch and Oak Flooring etc.
Everything in Lumber
John Harrison & Sons, Co., Ltd.
Owen Sound, Ont.
J H & S Co

Boot Calks

Made from Best Refined Tool Steel—Oil Tempered.

Quality Absolutely Guaranteed.

Made in Canada.

F. Bacon & Co.
Montreal

Charlemagne & Lac Ouareau Lumber Co.
Mills: Charlemagne, Montcalm, St. Adele

The Gres Falls Company
Mills: Three Rivers and Cape Madelaine

St. Gabriel Lumber Co., Limited
Mill: St. Gabriel de Brandon
Head Office: 524 Board of Trade, Montreal, P. Q.

Manufacturers of
Spruce and Pine Lumber and Ground Wood Pulp

Review of Current Trade Conditions

Ontario

The most interesting bit of news that Toronto lumbermen have received for some time is the report of increased building permits which have recently been made public. Although the increases are not of a very substantial nature, they are increases, and, taken together with actual increased enquiries and sales reported by many retailers, they indicate good reason for feeling that conditions will improve, although probably at a slow rate, during the coming months. No one will expect very active business this winter, but the enormous grain movement throughout Canada, with the expenditure of money which it involves, and the great demand upon stocks of spruce and birch in Ontario for the manufacture of shell boxes, must combine to make things far more pleasant to the lumber trade than they have been for some months past. The increase in building reports may be easily ascribed to the better commercial and industrial conditions brought about by the above factors, and, this being the case, they are likely to be followed by other increases, not only in building permits, but in trade activity generally.

One does not like to assume the role of a prophet under the present exceptional conditions, but there is ample justification for feeling that the lumber trade will at least see better times in the near future than it has in the immediate past. These views are entertained also by wholesalers, and to some extent by manufacturers. Certainly the conditions in Ontario, so far as stocks are concerned, both at mill points and in wholesalers' and retailers' hands will be conducive to improved trade conditions, if the expected improvement in the demand develops. Manufacturers last winter took out considerably less lumber than formerly. Wholesalers have been extremely cautions ever since the outbreak of the war and are, in practically every case to-day, on a sound footing, with firm bank accounts and small stocks in their possession. Retailers similarly have been allowing their stocks to decrease to the limit of safety, and will have to make extensive purchases if the demand for lumber becomes at all active. It is interesting to note in connection with the shell box industry that stocks of spruce, of suitable sizes, have been heavily drawn upon and reports are frequent that pine is being used and accepted in its place. There has also been some endeavor to have the shell box committee accept B. C. fir for this purpose, but at present this has not been done.

There are no other features worthy of special comment. The trade is working along quietly upon its long established basis of a hand-to-mouth business in practically all lines except those for which there is a special demand growing out of the war.

Eastern Canada

During the past two weeks there has been a certain amount of improvement in the trade at St. John, N. B. A few people who have been holding back in their building operations, expecting to see the war situation a little cleared up, have given up waiting and gone ahead with their expenditure on building. Rough lumber is moving more freely. An extensive contract is now being carried out for the construction of warehouses on the new dock at West St. John, which is using up large quantities of hemlock. Merchantable spruce board stocks are heavy at $12 to $15 per thousand, and buyers are not very plentiful. Refuse lumber is slow and stocks are very large. Country mills are offering their summer's cut at $7 per thousand upwards and very little trade is to be found. Shipments of English deals from St. John have diminished greatly. Most of the recent shipments have been large Admiralty orders. Stocks at the mills are light. Contracts for winter sawing have not yet been given to rotary mills. A year ago there were many mills of this class in the woods already. Lath continues quiet at about $2.60 on wharves at St. John. Stocks are moderate. Very little stock is moving to the American market and no further important changes are looked for this season. A slight stiffening is reported with the base price about $23.50 Boston. A little improvement is reported in the American demand for hemlock. Shingles are weak and unchanged in price. The box trade is active.

In Montreal, as in many other parts of Eastern Canada, a distinct improvement in trade conditions was reported a fortnight or more ago. At first, those who thought they saw this change were rather doubtful about it, but the opinion has been growing steadily and is now pretty generally accepted. It has been backed up by increased building reports and increased earnings on the part of the railroads to such an extent that it is now impossible to discredit the report. Undoubtedly there is a larger volume of general trade in progress throughout the country and this applies strongly to eastern Canada. One of the important factors in this improvement has been the shell box business, which has brought about the circulation of enormous sums of money in the woodworking industry and has given it quite a healthy glow of life. The export trade to the United Kingdom is very quiet, only a small quantity now being shipped. The season is practically at an end, whereas in ordinary seasons the end of October sees very active shipments. The scarcity of cargoes this year prevents the likelihood of any further large shipments. The export trade to the United States is on a moderate scale.

The eastern spruce market at Boston is unquestionably firmer. $23 Boston rate is now the lowest price for eight-inch frames. Transactions are reported at $23.50 base. Continued improvement is reported in the demand. The large manufacturers have nearly as much business as they can handle at present. The range of prices on random is as follows:—2 x 3, $19.50 to $20; 2 x 4, $20.50 to $21; 2 x 5, 2 x 6 and 2 x 7, $19.50 to $20; 2 x 8, $21.50 to $22; 2 x 10, $23 to $23.50; 2 x 12, $23.50 to $24. There is a tendency, however, towards higher prices than these. The market for spruce boards is not quite satisfactory. Offerings are heavy. Random covering boards, 5 in. and up wide, 8 ft. and up long, are quoted at $19. Matched spruce boards, 10, 12, 14 and 16 feet, are selling at $21.50 to $22.50. The demand for shingles at Boston is fair and is improving gradually. Fairly satisfactory makes of white cedar extras are offered at $3.15, but there is some business at $3.30 and $3.40. Clears are offered at $2.70 to $2.80 and second clears at $2.25 to $2.40. Lath are moving well and the supply is light. Some manufacturers are quoting $4.25 for 1⅝-in., and the lowest price is $4.15. For 1½-in. the quotation is about $3.50.

Great Britain

A considerable volume of trade continues in the spot market at London. Arrivals of fresh goods are quite plentiful. A lot of difficulty still prevails in handling stocks at London, and, as a result, the consumption is restrained. The trouble is the result of the great shortage of skilled labor. Values show but little change, the tendency still being towards firmness for any useful sizes. The demand which exists is of a varied nature, coming from quite a variety of trades, including packing case and joinery makers. Although the stock of deals, battens, spruce and floorings is considerable, it is really only moderate in view of the steady demand. There is not much likelihood of any large surplus remaining on hand at next first open water. Deliveries at London docks for the week ending October 2nd amounted to 6,222 standards, as compared with 6,633 standards during the corresponding week of 1914. At Foy, Morgan and Company's recent auction sale, 3 x 9 u/s St. John spruce sold for £17 5s. and £17, 3 x 8 and 3 x 7 ditto £16 5s. and £16 10s., 3 x 6 ditto £16 5s.

At Liverpool, the general demand is still restricted, but there is a strong demand for timber for official requirements. The consumption all round may be regarded as fairly satisfactory. Recent arrivals are on a moderate scale and values for forward business are firm. Freights show no sign of declining. No material change is reported in the spruce deal market for cargoes to be shipped from New Brunswick and Nova Scotia. The tendency is still upwards, influenced by the higher freight rates, and the higher cost of winter insurance. No one can give a reliable figure as to the price "to arrive" for spruce deals, because shipments now range from 100 standards by small sailing vessels, to 1,000 standards or more by large tramp steamers. Stocks of spruce deals at Liverpool and Manchester were 35,960 standards at the beginning of October, or about 52½ per cent. greater than in the corresponding month of 1914. Shippers, however, are still selling at the slightly higher rates, and holding out for more money. Imports from the Pacific coast to Liverpool are continuing in good proportions. During August, receipts from this quarter were 7,801,671 feet. Last year the August shipments were only 425,907 feet to Liverpool.

At Manchester there is little change in trade conditions to report. Apart from war work very little is going on in the ordinary trade. Trade in spruce is rather quiet, but the likelihood is that the end of the year will see light stocks. Imports for September compared favorably with those of September, 1914, and included 9,432 standards of spruce, almost double the quantity of a year ago. Other substantial increases occurred in Quebec board pine and birch. At Glasgow, trade conditions are unchanged. Imports consist for the most part of yellow pine deals and scantlings, birch logs, etc., but the demand is scarcely keeping pace with the imports, particularly in regard to yellow pine.

United States

One of the most interesting and encouraging features of the lumber trade situation in the United States is that in connection with orders and shipments of yellow pine. Each week the statistics are

View of Mills in Sarnia.

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Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

showing improvement. From 142 mills, during the week ending October 8th, the orders exceeded shipments by 19,420,000 feet or 20.954 per cent. The increase in orders as compared with the previous week was 5.151 per cent. Undoubtedly the situation in the southern yellow pine territory is gradually but steadily increasing. Reports from other lumber sections and from many consuming districts also indicates that the improvement is by no means local, but fairly general, even though it is still rather slight. Trade is unquestionably improving and prices are advancing. Moreover, the outlook is distinctly promising. The demand, taken all round, is pretty nearly normal, and stocks have been steadily reduced for a long time, so that it looks as though the buyer will not have his way quite so much as he has in the immediate past. Southern yellow pine is really the dominant factor in the lumber market to-day. The production has been kept well within bounds, and sales operations have not been unduly pushed at the expense of profits during the past month or two.

In the general trade situation there are also encouraging features. From September 1st to October 1st there developed a great reduction in the surplus of idle railroad cars. The great grain crops commenced to be moved, and the railroads are already confronted with a problem that they were not fully prepared to solve. Although car building still remains light, the railroad companies are very busy with repairs which require considerable quantities of wood. Lumber stocks in country yards have become greatly depleted and a large amount of filling in is now in progress. The larger retailers and the line yards are, in a number of instances, looking into the future and are both buying for immediate requirements and trying to place orders for future delivery. The mills, however, are still playing safe and not encouraging future business.

During the past few months there has been a gradual but steady increase in the price of southern yellow pine, amounting to about $2 a thousand feet. Northern hemlock has benefited to some extent thereby. Stocks of hemlock are plentiful, but the higher price of yellow pine is making buyers look to the hemlock more favorably. There is a free movement in the northern pine, as well as in western white pine. There is no important change to report in Pacific Coast conditions. In the hardwood trade, conditions are not quite so promising as in the other woods. In the north, stocks have been accumulating for some time, but prices have been pretty well held, and there are now good indications of a widening market. It will be some months, however, before the demand will be sufficient to look after stocks on hand and output.

The improvement in the general lumber trade situation is unquestionably the result, to a large extent, of the assistance given by war order business which has gradually spread its benefits throughout the whole country.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Trade Showing Improvement

St. John, N. B., October 25th (Special to the Canada Lumberman):—Business locally has not fallen off during the last two weeks. In some ways it has shown an improvement. Rough lumber has been moving more freely. Some buildings which were talked of earlier in the season, plans for which had been made, have now been started. This gives a certain number of fall houses being put on the market, which is unusual, but this has been caused largely by persons waiting for the financial atmosphere to clear, who, finding that the war situation remains in the same position, decided to go ahead and build their homes. Of course, the amount of building is limited. The largest contract now being carried on here is for the building of the sheds or warehouses on the new docks at West St. John, three of which are under construction by Rhodes, Curry Company, of Amherst, who have the contract. Hemlock is being largely used in these buildings. The rough lumber is being largely supplied by Murray & Gregory, Limited, of this city. The contract calls for completion by December 1st, 1915.

Stocks of merchantable spruce boards are still very heavy, with practically no buyers. Prices run from $12 to $15 per thousand superficial feet, according to how much the seller wishes to dispose of the stock. Refuse lumber of all kinds is piled in yards, stock being very heavy. Prices are unstable. Country mills which have their summer's cut to market are selling refuse from $7 per thousand upwards, and very few buyers can be found.

The shipments of English deals from this port have lessened very much during the past two weeks. About all the stock which has been shipped to English market has been on Admiralty orders, but has been largely wide spruce boards. It is said that very little stock will be moved until winter liners begin their sailings. A certain amount of deals will be shipped, but the quantity should not be heavy, as stocks at the mills are light, some of the mills have ceased sawing, in fact only three mills are sawing English deals at the present time. A certain amount of country sawn deals are piled in scows, and in the interior. No contracts have been given for winter sawing as yet to rotary mills. Last year, at this time, a great many mills were placed in the woods, and logs were being cut for them. The cut of deals in the interior last winter was three or four times as large as it will be during the coming winter, unless some change comes for the better. Practically no space is being offered at any price by ocean vessels. One hundred and sixty to 175 shillings is a common quotation, but with no guarantee of space, prices in England remain unchanged. No contracts have been given for next year's cut of deals from city mills.

Laths remain in about the same position as during the past month, viz., about $2.60 on wharves at St. John. Stocks are fair but not excessive.

Very little stock is moving to the American market, and it is now felt that very little change can be expected from that market for this season, although during the last few days it shows a stiffening tendency with base price about $23.50 Boston. New York is about in the same position, but orders are coming more freely.

Hemlock is showing some improvement in the American market, but stocks of boards at St. John, fit for the United States are practically used up in local consumption.

Shingles are weak and unchanged in price. The box trade is in a pretty healthy state. Many war orders and foreign orders are being placed and the fish trade is also good, so a bright outlook is ahead for the box trade for some time at least.

No change has taken place in the matter of stocking logs for 1916, the operators are still waiting until they feel that they must either go ahead and cut, or not have any logs for 1916. Prices have not been set, nor have any contracts been made. About fifteen million logs still remain in the river from last year, these will not come out until 1916.

Ottawa Trade Notes—More Shell Box Orders Expected

Ottawa, Ont., October 27 (Special to the Canada Lumberman):—News of the re-organization of the Shell Committee and the addition of new membership in the person of British experts has created great interest in lumber circles at Ottawa. Your correspondent is in a position to state, however, that the changes will not affect in any way the demand for shell boxes or the conditions under which they are to be supplied in future. Further large orders, in fact, are expected after the re-constitution of the Shell Committee, and these will entail increased orders for shell boxes as well.

Newspaper statements to the effect that there were 1,500,000 loaded shells of variable kinds, shipments of which was delayed owing to the lack of boxes in which to pack them, have been denied by the Shell Committee. It has been discovered on investigation that it is brass shell casings, not wooden shell boxes, that are scarce. As regards the latter, General Bertram, chairman of the Committee, states that boxes of one class had been ordered for eight months' supply, and for another class for six months, and there are more in stock at present than will be needed to take care of present orders.

An interesting case involving the interests of lumbermen operating on the Gatineau River was up before the Supreme Court last week. As a result of the intervention of the Attorney-General of Quebec province, permission for which has been given by the Court, the case promises to become famous, as he has given notice of his intention to introduce evidence which will date as far back as the first settlement of Canada itself. The suit is that of Leamy vs. the King, in which the Misses Leamy, of Mull, claim part of the bed of the Gatineau River, now used as a site for the Government's boom works on this stream. They claim it, as descendants of Philemon Wright, an early settler, who was given a grant of the land in question. The Province of Quebec last week obtained permission to adduce evidence in regard to the navigability of the river previous to the grant to Philemon Wright. For this reason it promises to file as exhibits the instructions given to Canadian governors prior to the ces-

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Extensive New Brunswick and Quebec timber limits, abundant with Virgin Spruce, Pine and Hardwoods.

Twenty years' experience in Milling and Manufacturing, together with a practical knowledge of Building and Architecture, is why our Customers tell us that the Dressing, Grading, and Manufacture of our Stock is just a little better than they expected.

Large stocks of 1 in. Spruce Lumber always on hand.

Try a car of our Air-dried Dressed Spruce.

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Campbellton, New Brunswick

sion of Canada by France and Imperial instructions subsequent to that date in regard to the disposal of Crown lands.

In a case argued at its last session some months ago, that of the Halifax Power Company vs. the Dominion Lumber Company, the court last week decided in favor of the lumber firm, dismissing the appeal with costs.

There is a scarcity of workmen in Canada to-day, and the situation promises to be worse before the winter is over. Information gathered by the Labor Department shows that, in the lumber woods, there are more places than men. An application for a thousand men has been made to Hon. T. W. Crothers, Minister of Labor, by a company which is establishing a pulp mill in Northern Quebec on the Transcontinental Railway four hundred miles midway between Quebec and Cochrane. A New Brunswick lumberman has asked for 500 men and suggests that it they cannot be found the German and Austrian prisoners of war should be placed at the disposal of firms in need of workmen, as is done in Germany, for instance. It is extremely unlikely, however, that this will be done.

Montreal Trade Showing Improvement

Montreal, October 27 (Special to the Canada Lumberman):—The slight improvement in trade noted a fortnight ago has continued. The demand for box lumber is, of course, mainly responsible for this better trend of business, but even aside from this abnormal circumstance, there is a slight gain in trade.

Those factories with shell box orders are manufacturing as fast as possible, and are working in day and night shifts. One hears some criticism of the orders given out. They have been given out, it is said, without sufficient regard to the ability of some of the firms to turn out the goods. Box making, apart from the war orders, has been dull, and some firms would be glad to accept shell box orders. Some companies which are not in any way connected with the trade and which have received orders had, of course, either to equip factories or to sub-let, presumably at a profit, and at least one concern took this latter course. Whatever may be the reason there is considerable complaint that contractors, engineering companies, and public utility companies—should be given large contracts and box manufacturers ignored.

A comparatively small quantity of lumber is being shipped to the United Kingdom, and the season is practically finished. In normal times exporters are, at this period, working at full pressure, rushing goods to the other side, but the lack of cargo space has effectually shut off any possibility of further large shipments this year. At a meeting of the Council of the Board of Trade it was announced that a satisfactory arrangement had been made regarding the rate of exchange fixed by steamship lines for the payment of ocean freight and charges. Both the Shipping Federation and the Canadian Pacific Steamship Service have agreed to the Council's suggestion that a fixed rate be adopted of 9½ per cent. or $4.86 2/3 to the pound sterling.

Trade with United States markets continues on a moderate scale.

B. C. Export Trade Improving

So many reports of extensive orders for British Columbia timbers have recently been received, that they are coming to be rather a common occurrence. They are none the less interesting and important, and one of them which came out recently is especially so. It tells of an order for two ship loads of Douglas fir railway sleepers, for shipment to Europe, the order having been received by the B. C. Mills, Timber and Trading Company, Vancouver, B. C. It is believed, moreover, that these orders are the forerunners of many others which are expected in the near future. The material required to fill these orders will be prepared at once, and shipped early next year. Mr. E. W. Hamber, managing director of the Hastings Mill of the above company, corroborated this report, and said:—"We have booked these orders through our European agents. We have not quite completed the shipment of an order for 10,000,000 feet of Douglas fir for the British Admiralty, received some time ago. Altogether we have now, and in course of preparation, three cargoes for Australia, three for Great Britain, one for Fiji, two for South Africa, two for the continent of Europe, and three for Japan." The success of this company in securing such extensive orders is most encouraging, and indicates clearly the value of personal and efficient representation in the foreign markets. It also indicates strongly that British Columbia could secure a very large export trade in its lumber products to-day if ample tonnage were available.

A despatch from Amherst, N. S., states that the cut in the woods in Cumberland County during the coming winter will be much smaller than during last winter. The difficulty in chartering vessels has resulted in much of last winter's cut not yet being shipped. Large quantities of lumber are reported to be piled along the Intercolonial Railway which will probably be held over for next season's shipment.

Another Portable House Order Rumor

The latest rumor in connection with portable houses is one to the effect that B. C. mill men have been asked to bid on a contract for 500,000,000 feet of lumber to be used in constructing 100,000 two-room houses in France. The houses, the report says, are to be built at Government expense for the use of people who have lost their own houses and other property in the war. The Commissioner of Commerce, Ottawa, has no information regarding this enquiry. The probability is that it is a repetition of the old rumor about an order for 20,000 portable houses, and that it has grown considerably since its former appearance. This conclusion is strengthened by a telegram received by the Commissioner of Commerce from the Chief Forester, Victoria, B. C., in reply to a telegraphic enquiry. The Chief Forester wires as follows:—"Cannot locate any enquiry for hut material for 100,000 houses in France. If I learn of anything further will immediately advise you."

Studying B. C's. Shipping Situation

The shipbuilding committee of the Board of Trade, Vancouver, B. C., held a meeting recently to discuss the scheme brought forward by Mr. Hugh McLean, as reported in the October 15th issue of the Canada Lumberman, for the building in British Columbia of vessels for the lumber carrying trade. No definite conclusion was reached, but the chairman, Mr. E. W. Hamber, and the secretary, were instructed to draw up a full report of what has been done in connection with this subject, and to have the committee's recommendation embodied in the report, all of which will be submitted subsequently before a full meeting of the Board.

Important Workmen's Compensation Decision

An interesting and important decision relating to the Workmen's Compensation Act of Nova Scotia, in its application to the lumbering and sawmilling industries, was given recently by A. J. Campbell, K. C., arbitrator, at Truro, N. S. The point at issue, arising out of a claim for damages, was whether a man employed in a portable mill was "employed in lumbering," or whether he was "employed in a sawmill." The respondent claimed that the applicant was not a workman to whom the Act applied, inasmuch as he was "engaged in lumbering," and second, that the injury to the applicant was attributable to his own serious and wilful misconduct. In the course of a detailed consideration of the points at issue the arbitrator said:—"The evidence shows that, while the word 'timber' and the word 'lumber' are sometimes used to denote the same thing, still, the term 'timber' is properly applied to trees cut and trimmed, or roughly hewn, while the word 'lumber' means the finished product after having been sawn. The above quoted definitions make the word 'lumbering' or 'lumberer' applicable to those who fell trees and shape them into logs, and show that a distinction can be made between employees employed in lumbering and those employed in sawmills." Further on, the arbitrator said:—"I therefore find that the applicant, an employee employed in a sawmill and injured while in such employment comes within the provisions of the Nova Scotia Workmen's Compensation Act." He found also that the applicant was not guilty of serious or wilful misconduct and was therefore entitled to an award under the Act. It is understood that the Lumbermen's Association of Nova Scotia will contest the arbitrator's finding.

A Doubtful Investment

A too trusting investor from the north once bought a sawmill in the White River bottoms of Arkansas. When he went down to take over his newly purchased property and to assume its management, the recent owner met him at the railroad station and bade him welcome.

As they climbed into the native's buggy to drive through the woods to the spot where the plant was located, the stranger said:

"I wish you'd give me a few hints right off about how to run this business profitably. You see I'm a little bit green at this line. I've been a lumber dealer all my life, but I never undertook to handle the raw material before."

"Well, mister," stated the Arkansan frankly, "I wish I could give you the advice you want, but I reckin I jest don't know myself. My father-in-law died and left me this here mill in his will. My two boys helped me to run her and there wasn't no other hands, and so I never had to pay out nothin' for wages. I stole all the timber I cut, and my stepbrother, who's the division freight agent for the railroad, used to slip all my lumber out for me so I never had to pay no freight charges—and last year I come out twenty-seven hundred dollars behind."

Shell Box Lumber

DRY BIRCH

WE have in stock approximately three (3) million feet of 4/4-8/4 and 12/4 Birch sawn during seasons of 1913-1914 and 1915. This is particularly suitable for manufacturing or Boxing purposes as it was sawn partially square and partially round or live edged.

We have extensive Kiln Drying, Resawing and Dressing Plants and can work to order.

DRY SPRUCE BOARDS

We carry the largest and best assorted stock in Canada.

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Machinery and Equipment

What Manufacturers of Logging, Sawmill and Woodworking Appliances are Doing

Wet Refuse Easily Used for Power Production

Sawmill, pulp and paper manufacturers have long puzzled over the problem of how to utilize their hog feed, which contains a valuable amount of heat. Because of its high moisture contents (more than 50 per cent.), the heat in this refuse has until recently been an absolute loss. Before the proper way was found to utilize hog feed it was the common practice to build immense brick furnaces for the purpose of burning this refuse. These furnaces were sometimes 100 feet high and 20 feet in diameter. They were continually filled because in many mills storage of the wood refuse was impossible. These brick furnaces were screened at the top to prevent the escape of fire brands, and even with this protection it was necessary constantly to have on duty a "fire department," as the sparks and fire brands endangered the whole vicinity. There was also a great expense necessitated through maintaining the machinery required in transporting the wood refuse to the furnace to be burned. Experiments were often made in an attempt to burn the wood refuse with coal and to develop power, but this necessitated a greater expenditure for coal than was required for coal alone to meet the power plant demands. This practice, of course, was never continued for any appreciable length of time. Some manufacturers dumped the refuse into adjacent river beds; others, having in mind the ultimate utilization of this waste product, allowed it to accumulate in their yards where space permitted.

Within the past few years the idea of burning this hog feed in the Jones Underfeed Stoker was conceived and put into operation, really contrary to the advice of the manufacturers of the stoker, who had grave doubts and for a long time declined to consider the idea favorably. It was really forced upon them. To-day this hog feed, in combination with a very small percentage of coal, is keeping up a reliable, dependable, even, steam pressure in the power houses of saw, paper and pulp mills throughout the country.

When it comes to a question of burning mill refuse for generating steam, the manufacturers claim that there is no system so well adapted, no applicacation of any other type of mechanical stoker so simple, so easily and satisfactorily operated, as the Jones Underfeed Stoker. The stokers are installed under a number of the largest and most modern pulp and paper mills throughout Canada and the United States, where they have shown that a great amount of coal can be saved by the installation of the Jones stokers, using a system combining the burning of paper mill refuse in conjunction with a small proportion of coal. The retorts are placed in a Dutch oven setting, and coal is fed to the furnaces from underneath, the refuse being fed from overhead through "bull's eye" openings in the roof of the furnace arch. The coal feed on the stokers is adjusted to feed a minimum amount of coal to maintain a sufficient furnace temperature, and insure proper ignition of the refuse, which is usually moisture saturated. The equipment is automatic throughout, being under control of the steam pressure itself. The air supply and the coal feed will increase should a shortage in the regular supply of refuse occur. If, for any reason, it were necessary to abandon the refuse temporarily, on account of a shortage of supply or for other causes, the equipment immediately start up firing more coal, adapting the speed to the new conditions without wood refuse and without requiring any change over of equipment on the part of the operator. The Jones Underfeed Stoker Company, Limited, Toronto, the sole manufacturers in Canada of the Jones Underfeed Automatic Mechanical Stoker, will be glad to send an illustrated catalogue to any firm interested upon request.

E. C. Atkins & Co.'s Splendid Canadian Plant

Anyone who thinks that a saw is merely a piece of steel with teeth cut in it, is invited to visit the saw-making plant of E. C. Atkins & Company, at Hamilton, Ont. He is requested to walk through the plant and inspect the various processes of saw making. There he will find operations that were heretofore unknown to him. Then he will realize, as never before, that saw making is an art, requiring the highest degree of skill and practical knowledge.

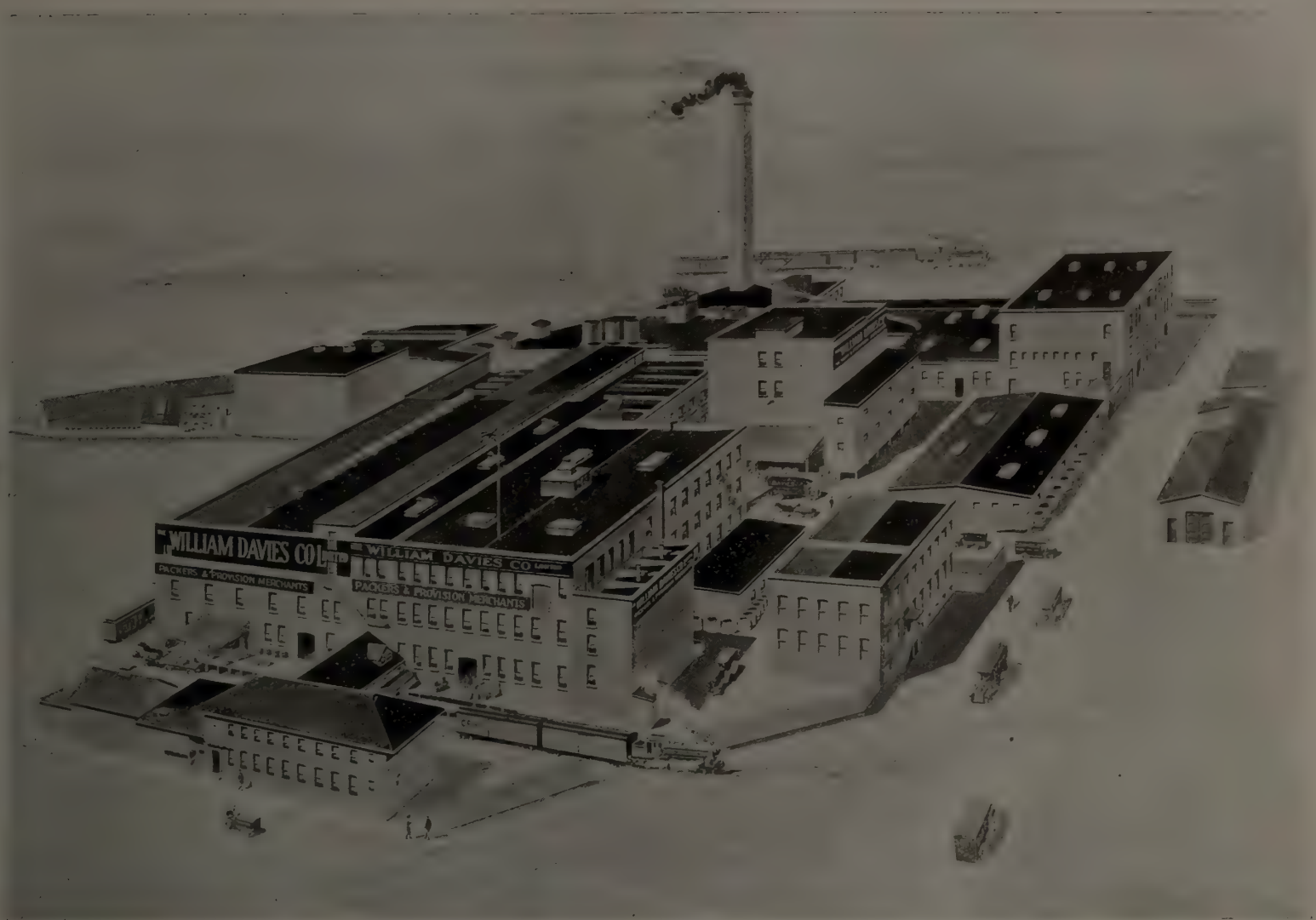
The accompanying illustration represents a general view of the plant. The buildings throughout are strictly modern and the machinery and general equipment is of the most improved type. Most of the machinery used is of special design, and the various processes, insuring uniformity of temper, accuracy of grinding, proper tensioning, fitting, etc., are the inventions of the Atkins Company, and used by them exclusively.

E. C. Atkins & Company make only the very finest saws, for high duty, such as band saws from the largest sizes, band re-saws, and narrow bands, down to ⅛ of an inch wide. Then there are circular saws, both solid and inserted tooth, including the widely-known Atkins Inserted Tooth Cut-off Saw. There are gang and edger saws, veneer and barrel saws, in fact a perfect saw for every purpose. They make also a specialty of machine knives of all kinds, such as planer

Loading Refuse into Hopper Cars, Minnesota & Ontario Power Co., International Falls, Minn.

Delivering Wood Refuse to Conveyor System—Dells Paper & Pulp Mills, Eau Claire, Wis.

Three boilers fitted with Jones Underfeed Stokers at Dells Paper & Pulp Mills, Eau Claire, Wis.



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WHEN making up your list of requirements for camp provisions don't fail to write or wire us (at our expense) for special prices on the following or any other lines. Lowest market prices given for best quality goods.

Barrelled Pork
Dressed Meats
Smoked and Cured Meats
Long Clear Bacon
Sausage
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Pure Lard
Peerless Shortening
Mixed Pickles
Sweet Mixed Pickles
Mustard Pickles
Mince Meat

PEERLESS SHORTENING

is unequalled for use in camp. Cooks get the best results from this shortening and appreciate its firm, smooth texture. Costs about 2½c. a pound less than pure lard. We also supply TOMATO CATSUP in bulk especially for lumbermen's requirements.

The
Wm. Davies Co., Limited
MONTREAL TORONTO WINNIPEG

Our Canadian Factory E. C. ATKINS & CO., Ltd. Hamilton, Ontario

knives, shear blades and other types of knives, including paper cutting knives.

There is scarcely a lumberman in Canada who does not know the genial manager, Mr. H. P. Hubbard. Mr. Hubbard has travelled extensively throughout Canada and has gained the acquaintance, close friendship and confidence of lumbermen everywhere. Mr. Hubbard is a practical saw maker, having been actively in charge of general saw manufacturing for the past twenty-five years or more.

The superintendent of the Canadian plant is Mr. Harry Blair. Mr. Blair extends a cordial invitation to his friends to visit him at the factory and inspect the efficient methods and safeguards which cover each process in saw making.

The Vancouver Branch House is located at 109 Powell Street, and is in personal charge of Mr. E. J. Banks. An entire building is occupied, and a complete shop equipment maintained for all kinds of repair work, and the finishing and re-fitting of many types of saws. Mr. T. H. Tait represents this Vancouver branch on the road, and is well known to the lumbermen throughout the western section of Canada.

Travelling from the Canadian factory are such old veterans as J. K. Chalmers, who is personally acquainted with every mill man in Ontario and the middle west, Mr. G. W. Schafer, a practical mill man of long experience, and Mr. C. R. Hubbard, who represents the company among the hardware trade.

E. C. Atkins & Company are the exclusive owners of a number of valuable patents for saw fitting tools and specialties, prominent among which are the Ideal Swage, Pribnow Swage Shapers, Atkins Sliding Sleeve Arbor for grinding machines, Atkins "AAA" Saw Guard, Lumber Piling Jack, Car Mover, Mandrels, Dimension Gauges, Brazing Tools, Gummers, Grinders, Etc.

Realizing the important part that the saw plays in the manufacture of things made from wood, the Canada Lumberman feels that a reference to this important industry is particularly appropriate in an issue of this character.

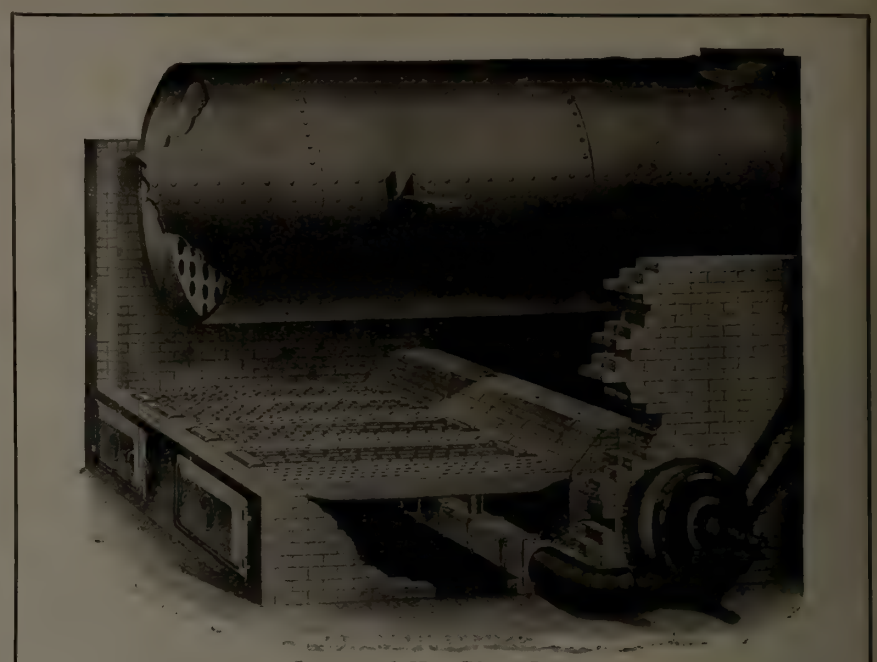
The Improved Hot Blast Grate

The Improved Hot Blast Grate, which is manufactured by the E. Long Manufacturing Company, Limited, of Orillia, has been installed in a number of mills throughout the country during the past year with much success. This grate is made under the later patents of Mr. E. J. Gordon, the originator and inventor of the hollow blast grate which bears his name. It represents Mr. Gordon's mature ideas after nearly twenty years devoted to the improvement of blast grates. It is claimed by the manufacturers of the Improved Hot Blast Grate that it increases the steaming capacity of boilers from 25 to 50 per cent., and gives as good results with wet and green wood or sawdust as a draft grate gives with dry wood.

The blast openings are distributed in four rows lengthwise along each blast bar. The blast from the outside rows is converging, while that from the inside rows is diverging.

In addition to the blast from these rows of opening, another blast is delivered forward from the tuyeres next to the bridge wall. This forward blast plays an important part, and is one of the distinctive features of the grate. Whereas, in the case of an ordinary grate, the draft has a natural tendency to take the gases and smoke away from the fire up through the smoke stack too quickly for them to be properly consumed, this blast from the tuyeres next to the bridge wall forces back the gases over the fire and supplies oxygen for their thorough combustion.

No change is required in the brickwork of the furnace to put in the grate, and it can be used in either furnaces or ovens, and in any number from one up. The work of installing is so simple that a very large installation can be set up in a few hours. All that is necessary



Improved Hot Blast Grate.

is to make an opening in the side wall of the ashpit and in the partition walls, if there are any, to allow placing the main blast pipe. The grate is made to fit the furnace. No especial skill is required to erect and place it into position for use. The manner of firing is the same as when using ordinary grate bars. Each blast bar is provided with a cleaning gate underneath. When the bar needs cleaning this gate is opened and the dust is driven out by the action of the blast.

The manufacturers have confidence that the Improved Hot Blast Grate will "live up" to the claims made for it and they offer to send one on thirty days' trial, with freight paid both ways, if it does not prove in every way satisfactory.

A New Adjustable Rod and Dowel Machine

"The Money Maker" Adjustable Rod and Dowel Machine, made by the W. S. Hawker Manufacturing Company, Dayton, Ohio, is a late design which, we are advised by the builders, is finding favor among users of the older, solid chuck type of dowel machines. Its one adjustable cutter head can be instantly changed to produce any size of rod or dowel within its range. Four cutters of high speed superior steel subdivide the chip and reduce the twisting strain on the dowel

The "Money Maker" Adjustable Rod and Dowel Machine.

Manufacturers of

Wood Products

of Every Description

Lumber, Box Shooks, Building Material, Sash, Doors, Windows, Hardwood Flooring, House trim in Pine and Hardwoods.

— Portable Houses —

In the heart of the Great Georgian Bay Lumber Centre

Georgian Bay Shook Mills

Limited

Midland - - Ontario

so that feed speeds may be used that are impossible on solid chuck machines. An ordinary day's work on kiln dried hickory stock ⅞ or 1 in. diameter is from 25,000 to 30,000 lineal feet. The machines turn soft wood equally well and a number of them have recently been furnished to box factories producing shrapnel shell boxes.

Saw mills, sash and door factories, bobbin mills, wood novelty works, chair factories, piano factories, curtain and rug pole producers and handle factories, all find this an invaluable tool, either for finely finished rods, or as a roughing tool to remove surplus stock. Millions of feet of waste edgings are now converted into profit through the use of these rapid production lathes. They are built in six sizes, and full information will be sent for the asking, by the builders, W. S. Hawker Manufacturing Company, of Dayton, Ohio.

A Machine of Great Value to the Building Trade

Five years ago a small woodworking machine was put on the market by Mr. W. A. Elliot, of Toronto. This machine, by its novelty of construction, light weight, the multiplicity of its uses, and its adaptability to every requirement, quickly won favor with carpenters and other woodworkers.

The following year, Mr. Elliot introduced the No. 2 Elliot Woodworker, which was much larger and equipped with a powerful electric motor; and other improvements were added, making the machine more suitable for heavy work, such as cutting joists, rafters, fence boards, foot, plumb and side cuts of rafters, as well as the stair work and the finest trimming.

The Elliot Woodworker works on the principle of a swing saw, the work being stationary, whereas with a stationary saw you have

The Elliot Woodworker.

to shove the material across. In ripping, of course, the saw is stationary. The Elliot Woodworker can be taken right out on the job, and with 50 to 100 feet of wire it can be used at the lumber pile, which saves bringing the material to the machine. There are now over 600 users of the Elliot Woodworker in Canada and the United States, and the machine is giving general satisfaction.

To show what the machine is doing the following record of one man's work for seven hours is interesting:—"Cutting 152 rafters, plumb and foot, 58 joists, fire cut both ends, 158 short attic studs, 80 collar ties, and 300 bridging, ripped and mitred."

The Dominion Government have two of these machines, the Ontario Government and Hudson Bay Company two each, and the new Toronto Technical School, Polson's Ship Yards, Robert Eimpson Company, and numerous other well-known concerns, are recent purchasers of the Elliot Woodworker. Since the war started a number of inquiries have been received from toy and specialty manufacturers, as well as makers of ammunition shell boxes, and a number of them have installed this popular woodworker.

The Elliot Woodworker, Limited, have their Canadian factory located in Toronto.

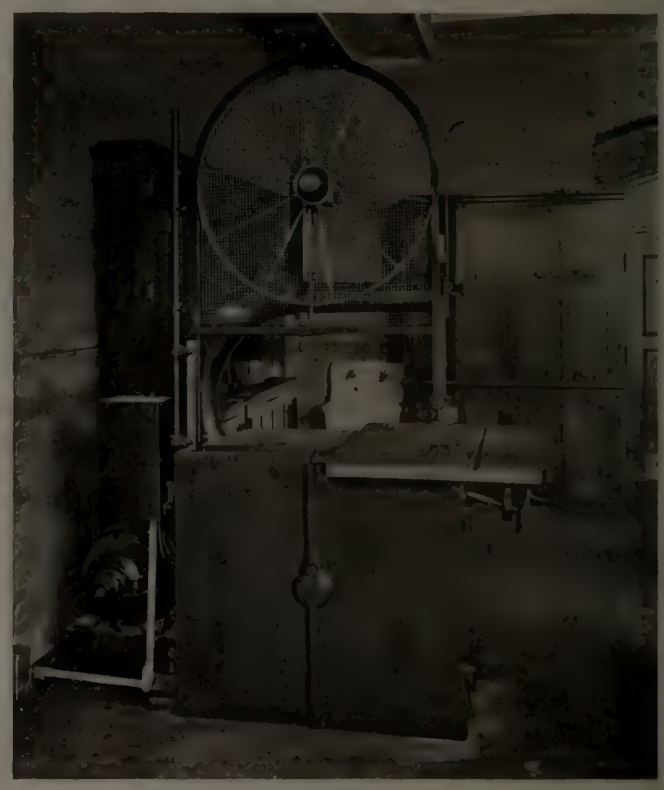
Makers of All Kinds of Woodworking Machinery

Cowan & Company of Galt, Limited, Galt, Ont., devote their whole attention to the manufacture of woodworking machinery. They have paid particular attention to the requirements of the woodworking trade and manufacture a large line of the most up-to-date machinery suitable for all classes of the trade. From the great variety of their band saws, rip and cross-cut sawing machines, moulders, surfacers, planer and matchers, tenoners and chain saw mortisers, they are able to supply a complete outfit of all the machines that are necessary for the manufacture of portable houses.

At the outbreak of the war the company found that they could not go into the manufacture of shells or other munitions without sacrificing the wood tool trade, but they have given special attention to machinery for shell and fixed ammunition boxes and have supplied a large number of customers with dado machines to cut five dados at one operation, heavy two spindle borers, eighteen spindle borers, five spindle cluster boring attachments, boring bits of all sizes, clamping machines, automatic screwdrivers, etc. They are in a position to give valuable information to parties going into the manufacture of ammunition boxes. Notwithstanding the war this company are, and have been very busy.

Preston Band Saws at Central Technical School

Manufacturers who are desirous of having efficient woodworking equipment will be interested in the three motor-driven 36-in. band saws which the Preston Woodworking Machinery Company, Limited, Preston, Ont., have lately installed in the new Central Technical



Preston No. 132 Motor Driven Band Saw.

School at Toronto. It will be worth while for any of them who are interested to visit the school and see these machines. They are equipped in both upper and lower wheels, with S K F self aligning ball bearings. Another important feature is that special attention has been given to guarding the saws.

Wood's Important Advantage

Prof. Chas. E. Paul, of the Armour Institute, Chicago, in a recent address before the National Lumber Manufacturers' Association, spoke of the advantages of wood construction. Prof. Paul stated that designers and constructors appeared to be forgetting the many good qualities of wood as a structural material, and were allowing newer materials and types of construction to serve their needs frequently in places where wood might be used to an equal or greater advantage.

He pointed out briefly such advantages as the general availability of wood; the ease with which it is worked and handled; toughness and elasticity as compared with other materials; its non-conductivity of heat and cold; the lack of contraction and expansion with change of temperature, and the pleasing effects which may be obtained easily and cheaply, due to its natural beauty.

One of the principal points upon which emphasis was laid was the advantage of the use of mill construction in factories, manufacturing plants and commercial buildings of moderate size. This point is of especial interest to British Columbia, where industrial plants built on the lines of mill construction, cost less than in any other part of Canada owing to the abundance of the local supply of timber.

Have You Asked This Question:

"Which is the best Time Recording System for me to buy"—

The Individual Time Card or the Dial Recorder

Your business may demand one or the other but the great majority of users to-day prefer the Individual Card System—and the following are some of the reasons as compiled by our Research Department.

1. The Individual Card—that is a separate time card for each employee—is very valuable because of THE GREATLY INCREASED PUBLICITY AT THE TIME OF RECORDING

2. GREAT FLEXIBILITY OF THE CARD SYSTEM, which allows an "IN CARD RACK" to be placed in each department, locked and opened only by the foreman, which does away with the loss of time, heavy in the aggregate, of the employee loitering between the Recorder and his bench This check is impossible with the Dial Recorder.

3. *The employee has more confidence* in the Card System He can see for himself that the record, at the time he makes it, is fair and correct, saving future disputes and giving him the proper mental attitude towards the recording system.

4. *In making up the pay roll,* the Individual Time Cards can be divided among several of the office staff, so that the work can be quickly done. With the Dial System one clerk, only, can handle the record.

5. The two color registration, the red showing every "late time in and every "early time out," is an intensely valuable feature as every employee sees his own card 24 times a week, impressing him EVERY TIME WITH HIS OWN TARDINESS OR SLACKNESS.

6. RELATIVE COST. The individual Time Card System is generally speaking, less expensive than the Dial Recorder.

Point number 2—FLEXIBILITY—explained above has brought about in thousands of plants the use of an Individual Card System in each department which not only saves the walking time but increases the output This naturally reduces the overhead. This feature has been commented upon in hundreds of letters received from time to time by our users.

Our product is the result of 30 years' experience and it is the best money can produce. The International Time Recording Company sells 90% of all the time recording systems throughout the world The reason: MERIT

With International Fully Automatic Time Recorders the employee never has cause to touch the recorder ot her than to simply insert his time card.

Why not take advantage of our skilled advice in selecting a Recording System that will save you money four times a day every working day in the year. Let us hear from you—writing for information puts you under no obligation to buy.

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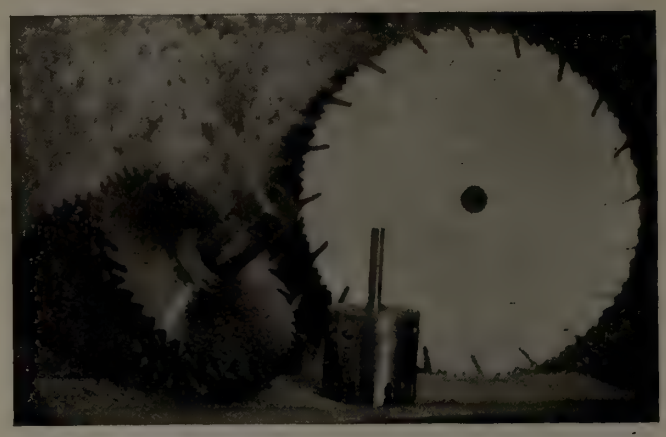
Saw Specialties for Shell Box and Toy Manufacture

The Radcliff Saw Manufacturing Company, Limited, of Toronto, have recently put on the market several specialties for shell box and toy manufacturers. One of these is their Beaver dado head which is used for cutting the grooves in the sides of the shell boxes, also for cutting the slots in end pieces of shrapnel boxes. These dado cutters will cut much faster than the solid head dado using knives, and in one plant a machine rigged with Beaver dados cut 9,000 box sides per day, as against 1,500 sides done on machines with solid head dados. In each piece grooved as referred to above there were five grooves cut across the grain at one operation, the grooves varying in width from 1⅜ in to 2⅝ in. to accommodate the bridges used to carry the live shells. Of special interest is the small cylinder saw shown in the centre of the illustration accompanying this article. This saw is made of best Swedish bandsaw steel and is only 19 gauge thick. It is fitted to a solid steel head with shank made to fit any drill or boring machine chuck. In the centre of this saw is a coil or spiral spring which ejects the core immediately the saw teeth cut through. This saw can be spring set for clearance and is already in use in a number of factories manufacturing shell boxes, for cutting the holes in the top and bottom trays of the boxes. For toy factory use it can be made



Radcliff Shell Box Specialties.

in any size for cutting out toy wheels. The simplicity of this cylinder saw, its labor-saving features and low price, make it a desirable addition to any woodworking plant's equipment for the manufacture of either shell boxes or toys. Besides these two specialties the company are also manufacturing special round-faced groover saws for cutting the groove in handle cleat for shell boxes, as well as a full line of planer saws. These planer saws are hollow ground so as to run without set and will cut either with or across the grain. The work is done so smoothly that there is no need of sanding whatever.

A Sample of Western Improvement

The following newspaper despatch from Abbotsford, B. C., under date of October 13th, is an interesting sample of many that are appearing nowadays in Western newspapers. Evidently business is becoming good with the mills and yards of the West. "It is very unusual for a large mill to refuse a big lumber order," says this report, "but this is just what happened when the Abbotsford Timber & Trading Company refused a lumber order from a Portland, Ore., firm the other day. This mill shipped out three carloads of lumber over the C. P. R. last month outside of shipments over the Great Northern and to the local trade. When it is considered that even in extra good times the highest number shipped in any one month was 100 cars this is a good indication that business is picking up.

"Mr. F. J. Boulter, the C. P. R. agent here, commented on the extraordinary lumber business over his section of the road this year and stated that forwarding charges for the month of September were fully 100 per cent. more than for the corresponding month last year, or an increase in total revenues of over $30,000.

"On Saturday, 24 carloads of lumber were shipped out by way of Abbotsford; yesterday, 19 loads went out, while the total for tomorrow will be at least 23 cars. A large number of carloads of shingles consigned to Boston and Eastern American cities go through this section, and recently the C. P. R. had to appoint an assistant at the Abbotsford station.

"These cars of lumber come from as far as Eburne and from the mills along the Fraser Valley, there being a B. C. E. R. and a C. P. R. interchange at Abbotsford. While the lumber shipments have increased by leaps and bounds, the grain shipments this year are very light over the interchange, so this great increase in traffic can be laid almost entirely to the general revival of the lumber trade.

Brighter Prospects in the West

Mr. Alexander MacDonald, of the MacDonald Company, Limited, Winnipeg, Man., after a recent trip to the Pacific Coast, spoke as follows in an interview:—"From what I learned from personal observation and conversations I have had with practical agriculturists on the crop situation, I think I am justified in saying that we will have at least 600,000,000 bushels of grain of all kinds as a result of this year's crop in the prairie provinces. This, at the very moderate average price of, say, 50 cents a bushel will give us over $300,000,000. Add to that the livestock, dairy produce, root crops, etc., and this will give us $50,000,000 to $75,000,000 more, so that, to say the least, we will have much to be thankful for.

"I went through to the coast and returned by the Crow's Nest, calling at Nelson and Fernie. At the coast things were rather quiet, but they were looking forward to a revival of business on account of our heavy crops and the demand for lumber which they expected at once. And they were justified in their expectations as I found out when reaching Fernie that orders for lumber had been so numerous that the merchants were short of men for the work of loading cars. Orders had poured in so rapidly, one firm stated, that they were sixty cars behind. All along the line you could see cars at different mills being loaded, and every train had many cars of lumber."

An Interesting B. C. Fire Report

Some interesting matters are touched upon in a report recently submitted to the Hon. the Minister of Lands for British Columbia from the Vernon District. The summer was abnormally wet, but the early spring, light snowfall and dry spring made a bad hazard until the middle of May, when until the end of July heavy rains safeguarded the situation. With the advent in August of dry weather, the vegetation rapidly became parched, and fires started to give trouble; but these conditions improved as the nights became cooler, and early in September rain put an end to all danger. Seventy-two outbreaks of fire during the season, with but slight loss, are recorded, and mention is made of the increasing interest shown by the public in forest protection. Much clearing was done by settlers under permit, the season proving very favorable. The opinion is expressed that the lumber industry, in view of the conditions, has shown wonderful activity. Thirteen mills have been running fairly regularly; those in the Okanagan supplying boxes and crates for the fruit trade, as a result of which employment has been given, and the machinery kept going. Approximately three hundred men have been employed at the mills, and a somewhat smaller number in logging operations. Orders for several million feet of fir for snowsheds on the Coquihalla Branch of the Kettle Valley Railway have been given.

The whole district has benefitted by the operation of the Kettle Valley Railway, and will do so to a far greater extent as soon as the Coquihalla section is connected up and opened, completion of which should be made during November.

Lumber Trade Conditions in Austria Hungary

The following interesting report upon the lumber trade in Austria-Hungary, during the war, is from a report published in the United States Commerce Reports, received from the U. S. Consul in Austria-Hungary:—"The lumber industry is one of the most stable in Austria-Hungary, for that country has forests that still afford a steady and large timber output. The forests, too, have been spared that unscientific robbery which has characterized other countries. The Slavonian oak has formed an important article of export. Prior to the beginning of the war this industry enjoyed normal activity, but the war immediately put an end to the shipment of such heavy raw material, while the demand for wood for building purposes was necessarily reduced, because new building enterprises were postponed and work in process of construction delayed for want of men, as well as because of the apparent desirability of conserving financial resources. Nevertheless, the demand for woods suitable for building barracks and for purposes of war was heavy and practically almost as great as in normal times. Flooring and staves were not in as great demand, and the wood industry as a whole was not free from the serious consequences of the war. However, the industry, where necessary, received financial support from banking institutions because of the certainty that when the war was over the demand for wood for all purposes of construction would be unprecedented. The market for staves was affected by the decreased requirements of the brewing interests, due to the higher tax on beer."

An interesting charter report from Vancouver recently is that of the schooner Hugh Hogan, owned in Portland, Oregon, and secured by the Balfour Guthrie Company to load 600,000 feet of lumber on the Columbia River for Shanghai, China. This is the first charter of an American wind-jammer to carry lumber from the Pacific Coast to China for some time past.

Lumbermen's and Railroad Contractors' Supplies

Cut No. 14.

FINE Worsted Long Stockings in Black, as cut No. 14. The ideal stocking for wearing with knickers or riding breeches.

Cut No. 5.

MACKINAW Jumpers, as cut No. 5, for lumbermen and sportsmen. This jumper is to take the place of the old rolled neck sweater and is very much more serviceable. It is light in weight, buttons close up to neck and has many advantages over both coat and sweater.

Cut No. 19.

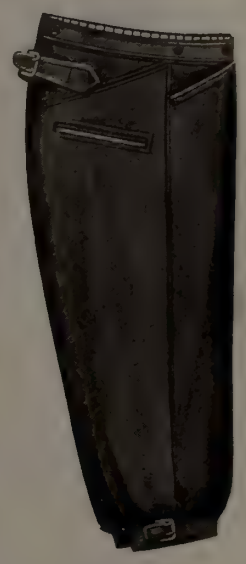
Cut No. 20.

Cut No. 21.

OUR Special Dogskin, Extra Large Pull-over Mitts, as cut No. 19. These we believe to be the biggest and best possible mitts to obtain for the lumbering trade. Our Home-made Hand-knit Wool Mitts as cut No. 20. Very generous sizes and perfectly proportioned. Can be used inside large fitting pull-overs to the very best advantage.

Special Large Horsehide Pull-over Lumbering Mitts as cut No. 21. Guaranteed water and fireproof.

Our Special Buckskin Mitt as cut No. 21. Indian tanned and cut. One of the very best values in the trade.



Cut No. 7.

Mackinaw Knickers

MEN'S Mackinaw, (Bird's Pure Wool) knickers as cut No. 7. Black shades only. Top and hip pockets. Strap or Wool cuff. Very convenient and comfortable wearing. Sizes 32 to 44.

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What the Season Has Taught Us

By M. A. Grainger*

Through circumstances which will probably never occur again British Columbia had an opportunity this year to judge of the actual effectiveness of two different policies with respect to fire protection. You all remember the hazard which was present last year. From early in July until September 8th in 1914 practically no rain fell, and the mean temperature was over 2 degs. above the normal. As a result British Columbia as well as the Northwestern States had to fight an abnormal number of fires under very difficult conditions.

What may be called the "take no chances" policy was followed in meeting the situation, and extra patrolmen were put on wherever there was need, and the standing instructions to the fire wardens were to attack all fires vigorously and extinguish them.

The effect of this policy was that despite the occurrence of over 1,800 fires and the presence of very unfavorable conditions for fighting fire, the acreage burned over in 1914 was kept down to 355,000 acres, and the loss of merchantable timber to 100,000,000 feet. This in an area of 150,000,000 acres and a stand of between 300 and 400 billion feet was considered a very satisfactory record for such a bad season. To accomplish this, however, required the expenditure of $225,000 for patrol and $145,000 for fire fighting, or a total of $370,000. The year's forest protection fund was early exhausted, and it was necessary to use $100,000 of the fund for 1915. The financial depression had the effect of still further diminishing this year's fund, and at the beginning of the season it was evident that every possible economy would have to be practised.

Consequently, what may be denominated a "take some chances" policy was followed in 1915. The number of long term guards was reduced from 190 to 172, some back districts being left entirely unprotected, and the size of the guard districts being generally increased. The fire season was shortened, the season during which permits were required and guards employed extending from May 1st to September 15th, instead of May 1st to September 30th as heretofore. Only 21 patrolmen were put on in the dangerous season, against 112 in 1914. Finally, instructions were issued to attack vigorously fires which had reached considerable size only in case they threatened merchantable timber. In other words, to sacrifice second growth and at present unmerchantable timber.

* Address delivered before the Western Forestry and Conservation Association Convention at San Francisco on October 19th.

The hazard in the region east of the Cascades was lighter than normal in the south, and about normal in the north. On the Coast the season was dry and hot, practically no rain falling for a period of six weeks in July and August, and in September the usual heavy rains did not materialize, fires continuing to burn until October. Most fortunately, however, the season was remarkably free from strong winds. Taking an average of the whole province the hazard during 1915 is considered by the fire wardens to be a little higher than normal. Had the same policy with respect to patrol and fire fighting been followed as was in force in 1914 when the hazard was much higher than normal, a very much smaller acreage burned over and timber loss could be looked for. The same policy was not followed, however, and it is instructive, to say the least, to compare this season's record with that of 1914.

The number of fires in 1915 was 964, against 1,832 in 1914, or almost exactly one half. In 1915 27 per cent. of the fires were extinguished in their incipiency as against 36 per cent. in 1914; only 30 per cent. were put out before covering 10 acres, against 33 per cent. in 1914. This brings the percentage of fires over 10 acres, the ones doing damage, to 43 per cent. in 1913, against 31 per cent. in 1914. Even more striking than the above are the figures for the average size of the fires. In 1914 with a much higher hazard the average area of all fires was 65 acres, while in 1915 it was nearly four times as large, or 237 acres. The evidence of the difference in the policies followed in the two years is also shown in the figures for cost fires. In 1914 the fires on which money was expended for fighting then amounted to 35 per cent. of the total, and in 1915 only 31 per cent. The most striking figures, however, are those for the average cost of fighting fires. In 1914 the fires fought averaged $219, against only $66 for 1915, a very clear indication of the fact that we were taking some chances.

The figures for area and damage are still more illuminating.

In 1914 the total acreage burned over was 355,000 acres. In 1915, with a lighter hazard, 228,000 acres, or 64 per cent. of the 1914 area was burned over by 53 per cent. of the number of fires.

The area of merchantable timber burned in 1914 was 42,000 acres, with 102 million feet of timber destroyed, against 16,000 acres and a loss of 79 million feet this year.

Now we are not ashamed of our record this year, rather we are proud of it, for with an expenditure of less than half that of last year we have effectively protected the merchantable timber, keeping the

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ALL kinds of dried fruit are getting scarce and consequently, high in price. We have some very good values in Raisins, Figs, Prunes, Peaches, Apricots, etc., etc., and would be glad to hear from you with a request for prices.

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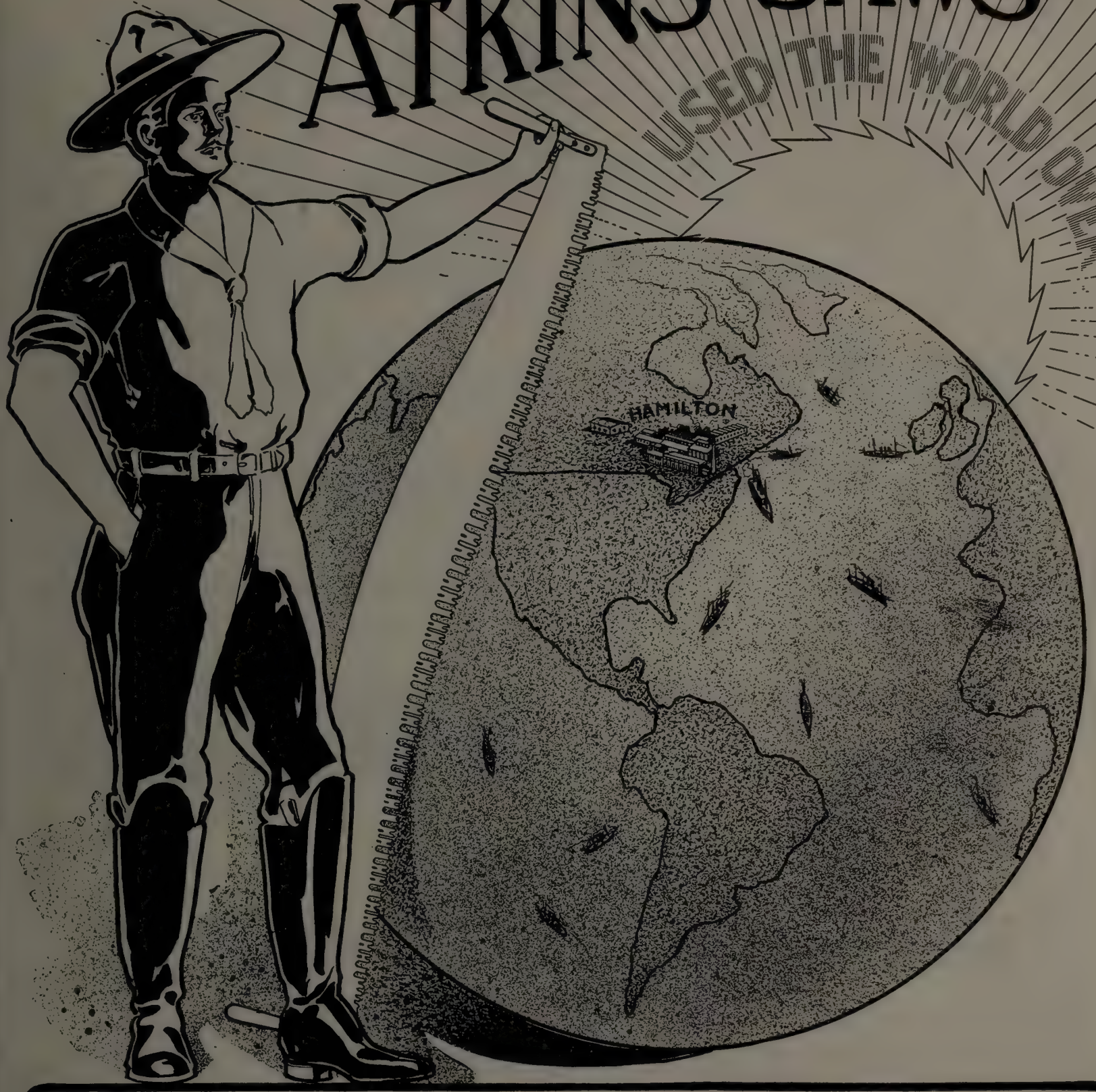

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timber loss down to .02 per cent. (2/100 of 1 per cent.) and the area loss to .112 per cent. (2/10 of 1 per cent.).

Had the season been a bad one, however; had there been a few days with an east wind, there is no question that the many fires in unmerchantable timber which the wardens allowed to burn would have spread to merchantable timber and caused very serious losses.

The lesson taught by the season is then the very old one that it doesn't pay to take any chances with fire. It is very satisfying, however, to obtain such clear proof as is afforded by a comparison of the results of the two policies mentioned, that systematic patrol and determined fire fighting does effectively protect the forests. At the same time the warning contained in the figures quoted of the inevitable results of any weakening in efforts at protection has not been lost sight of.

I cannot close without expressing the thanks of the Forest Service to the various bodies who have co-operated with us during the past year. Plans of co-operation between the Province and the Dominion and United States Forest Services have proven most helpful. The Dominion Board of Railway Commissioners through Mr. Clyde Leavitt has thoroughly organized the patrol of the Dominion Railways, and these and the provincial roads have assisted us greatly. The Forest Branch is particularly indebted to Mr. Napier Denison, of the Dominion Meteorological Department, since his forecasts aided materially in handling the patrol and fire fighting situation through the season.

Lastly, the heartiest thanks are extended to the many settlers, loggers, and railway employees who have lent their assistance to the forest officers.

An Interesting Timberland Judgment

An interesting lawsuit relating to standing timber has recently been before Mr. Justice MacDonald at Vancouver, B. C., who has now given judgment. The suit was in regard to a dispute between the North Pacific Lumber Company and the British American Trust Company over the right to possession of D. L. 175, Sayward district, Vancouver Island. Mr. Justice MacDonald's judgment gives the plaintiffs, the North Pacific Lumber Company, the right to cut timber on the land, but refuses to interfere with the defendants' claim to ownership of the land, under rights obtained by them through a Crown grant. The plaintiffs have been cutting timber from this land under a 21 years' lease, granted in 1888, which, according to its terms was renewable, so long as the plaintiffs paid their rental. The judgment therefore, entitles the plaintiffs practically to all the timber on the land.

The North Pacific Lumber Company came into possession of 23,600 acres of land on Vancouver Island under a lease granted in 1888 to Messrs. J. McLaren and J. Ross. After Mr. Ross' death the land passed into the possession of the Ross-McLaren Lumber Company, which went into liquidation, the North Pacific Lumber Company purchasing the company's holdings, among them being the land on Vancouver Island.

In 1893 Joseph M. Leigh obtained a Crown grant of 181 acres situated in the heart of the 23,600 acres held by the Ross-McLaren Company. In the course of time this grant passed from Leigh's hands to J. St. Clair Blackett and then to W. Wallace, it being purchased from the latter by the British American Trust Company. The lease was granted Messrs. Ross and McLaren by the Dominion Government while the Crown grant was obtained by Leigh from the Provincial Government. The enactment of legislation and the resurveying of the disputed land, since the lease was obtained by Messrs. Ross and McLaren, had led to the mix-up.

In giving judgment his Lordship refused to interfere with the grant which had come down to the British American Trust Company, but decided that the plaintiffs were entitled under their lease to cut the timber as long as their lease lasted.

Ontario's revenue from lands, forest and mines will this year reach, if not exceed, the sum estimated—$2,000,000. Last year the receipts from these sources, on account of the disorganization created by the war, fell short of what had been anticipated before hostilities broke out. This year's estimate seems to have been based pretty much on what was received last year. According to Hon. G. Howard Ferguson, Minister of Lands, Forests and Mines, there has been an appreciable improvement so far as lumbering is concerned, the American market, which was to some extent panicky twelve months ago by reason of the war, having proved better. The complete figures are not yet available, as the end of the year has not been reached, but a cursory glance at the figures as they came along each month indicates that the revenue will be in the neighborhood of the figures mentioned.

Jenckes Boilers

We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

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Specialists in Insurance on Lumber, Saw and Planing Mills

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Lumber Insurers General Agency

Mathews Gravity Carrier

The Mathews Patented Gravity Carrier is a great saver of time and money. It is readily portable and can be quickly moved to any place in a yard or factory of any kind. It will move timbers, boards, siding, shingles, cooperage stock, etc. from one point to another. It is particularly useful for loading or unloading. No power is required to operate the Mathews **Gravity** Carrier.

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H. BOURGOUIN
Dominion Express Bldg., 145 St. James St., Montreal
Wholesale Lumber and Timber
White and Red Pine, Spruce Hemlock
Railway Ties, Fence Posts, Etc.
Prompt shipment. Satisfactory stock. Good service. Write for Prices.
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For Sale
Two Double Cylinder Hoisting Engines and Boilers, one with 7 x 12 and one 6½ x 8 Double Drum, with booms, cables and everything complete for loading logs. Used only two months, well kept and good as new.
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CEDAR
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Dry Spruce and Birch
GOOD STOCKS PROMPT SHIPMENTS SATISFACTION
C. A. SPENCER, LIMITED
Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

The Noel-MacKay Lumber Company Ltd., Fort Frances, Ont., has been incorporated.

The Hardwood Specialties Ltd., Pembroke, Ont., are having plans prepared for the erection of a new plant to replace the one which they recently lost by fire.

At Coe Hill, Ont., a fire on October 24th destroyed a quantity of lumber in the yard of Mr. S. L. Purdy. The loss amounted to about 1,000,000 feet of lumber valued at about $7,000, and was covered by insurance.

The Huntsville Lumber Company, Huntsville, Ont., closed its mill early in October. During the winter this company will confine itself largely to taking out hardwood, for which it finds a good market in connection with war materials.

The Hope Lumber Company's plant at Thessalon, Ont., was recently closed down for some time on account of the non-arrival of logs which were delayed by bad weather. It is reported that the company has now decided to operate its mill, possibly on double shift, until the cold weather puts a stop to operations.

Reorts from Sudbury, Ont., state that a large pulp mill is to be erected about thirty miles west of Cochrane. The report states that $2,000,000 will be spent on the plant, and that most of this money will be provided by American capitalists.

Mr. M. J. O'Brien, the well-known Renfrew lumberman, has organized a company to go into the manufacturing of war munitions. The company is capitalized at $2,000,000, and it is understood that Mr. O'Brien himself has put $500,000 into it.

The eastern end of Jas. Playfair and Company's lumber yard at the water front, Midland, Ont., containing about 10,000,000 feet of lumber, besides a quantity of slabs, lath and pickets was burned on October 24th. The fire started about half past one in the afternoon, near the end of the coal dock. Firemen from Barrie and Penetanguishene were summoned to assist in fighting the flames, and although they could not save the lumber they succeeded in saving the mill and houses near by. The estimated loss is $325,000, those interested being the Massey Lumber Company, Massey, Ont.; the Union Lumber Company, Toronto; P. & J. Shannon, Biscotasing, Ont.; D. S. Pratt, E. J. Moore, the H. H. Hettler Lumber Company, Robert Cox and Company, Ottawa; Campbell and Johnson, Toronto; John Sutherland and Sons, the Georgian Bay Shook Mills, Midland, and the Midland Lumber Company, Midland.

Eastern Canada

Robert Westgate and Son, lumber dealers, Cookshire, P. Q., have been registered.

D. Joron, Registered, Pont Viau, P. Q., sash and door factory, has been registered.

The Canadian Pulp Company, Sherbrooke, P. Q., dealers in pulpwood, have dissolved.

The paper mill belonging to J. R. Walker & Company, Sault au Recollet, P. Q., was recently destroyed by fire, the loss amounting to $25,000.

Hodgson Bros., lumber manufacturers, Como, P. Q., have been registered. Those interested include G. C. Hodgson, Chas. Hodgson and Frank Hodgson.

Lamarre & Company, St. Remi, P. Q., sash and door manufacturers, have been registered. Those interested are H. Lamarre, A. Lamarre and M. Lamarre.

The shook factory belonging to E. E. Woods at Baie Verte, N. B., was recently damaged by fire, the loss on the building and machinery amounting to about $1,500.

The Shives Lumber Company, Campbellton, N. B., has decided to conduct operations in the woods this winter, and will take out at least one-half of its usual cut.

B. A. Mowat, Campbellton, N. B., reports that he has signed a number of contracts with men for work in the woods, and he will conduct camps during the coming winter.

The General Export Company, dealers in lumber and pulp wood, Montreal, P. Q., have been registered. Those interested are E. D. Howe, L. G. Corbeau and W. H. Cote.

Fire recently broke out in the lumber yard of Price Bros., Salmon Lake, P. Q., destroying between 120,000 to 150,000 feet of lumber. The loss is estimated at about $2,000 which is covered by insurance.

A partnership has been formed between P. Edward Bergeron and N. Eudore Bergeron, of Kedgwick, N. B., under the name of the Kedgwick Lum-

ber Company, for the purpose of buying, manufacturing and selling lumber.

Heavy rains recently caused a rapid rise in the Salmon River, N.S., and resulted in the breaking of a boom between Valley and Union, followed by the releasing of about 3,000 logs owned by W. S. Carlisle. About one-half, or possibly more of these logs will be saved, but at much extra expense.

Fraser Ltd., Fredericton, N. B., report that they have definitely decided upon the erection of a new mill at Nelson, N. B., in connection with the mills and limits which they recently bought from the Timothy Lynch Company at that point. They have not yet decided as to the size of the mill or the details of the equipment.

Western Canada

A sawmill is being erected on the Nikomekl River, B. C., by Mr. R. B. McLean.

The Otis Staples Lumber Company, Wycliffe, B. C., have commenced extending their logging railway.

The Monarch Lumber Company Ltd., Sanford, Man., has been succeeded by the Home Lumber Company Ltd.

The Sturgeon Lumber Company, Limited, Prince Albert, Sask., have opened a new yard at Shelbrook, Sask.

The Nanoose Shingle Company, Limited, has been incorporated with head office at Arlington, B. C., and capital stock of $5,000.

Leask and Johnson, Fort Steele, B. C., have disposed of their stock of dry lumber, which is being shipped to prairie points. They will probably resume logging and sawing operations in the near future.

The East Kootenay Lumber Company re-opened its mill at Loco, B. C., during the third week in October. The company has been receiving so many orders from the prairies that its stock has been greatly reduced.

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Fire recently destroyed the mill of Joyce Bros., Rock Creek, B. C., together with 5,000,000 feet of lumber belonging to the Rock Creek Lumber Co. The fire is said to have been of incendiary origin. The loss is partly covered by insurance.

The Prince Albert Lumber Company, Prince Albert, Sask., expect to employ about 1,500 men in their camps this winter. Their mill was closed down about the end of October. The Ladder Lake Lumber Company will do no logging this winter.

The Barnet Mfg. Company, Limited, have secured an extra-provincial charter with head office at 509 Bank of Ottawa Building, Vancouver, B. C., and capital stock of $20,000 to carry on business as manufacturers and dealers in timber, lumber and the products thereof.

A despatch from Grand Forks, B. C., states that the Western Pine Lumber Company has received orders for the shipment of 70 carloads of lumber to prairie province points, within the next four weeks, and that this will practically use up all the stock they have on hand.

The Sid. B. Smith Lumber Company, Limited, has been incorporated with head office at Vancouver, B. C., and capital stock of $10,000, to carry on business as dealers in saw-logs, timber, lumber, shingles, wood pulp and to manufacture and deal in articles of all kinds in which timber or wood is used.

Reports received from the Nelson district of British Columbia indicate that a good demand for lumber will be forthcoming from the prairies this fall. Eight mills, employing 250 men, are in operation in the Nelson district. Seven pole companies are shipping and yarding poles, and heavy shipments are being made to the United States.

Sealed tenders are being received by the Minister of Lands for British Columbia up to November 4th for the purchase of License X457, to cut 2,667,000 feet of cedar, hemlock, and balsam on an area adjoining Lot 907, Jack Creek, Loughborough Inlet, Range 1, Coast District. Three years will be allowed for the removal of the timber.

Sealed tenders are being received by the Minister of Lands for British Columbia up to November 11th, for the purchase of License X491, to cut 4,318,000 feet of Douglas fir, cedar, hemlock, and balsam on an area adjoining Lot 1907, Prince of Wales Reach, Jarvis Inlet, New Westminster District. Two years will be allowed for the removal of the timbr.

According to a despatch from Vancouver, there is a possibility of a pulp mill to cost $500,000 being erected at Quatsino Sound, where the Colonial Lumber and Paper Company have over 55,000 acres of pulp lands, and a water power of 20,000 miner's inches. It is stated that Mr. Lester W. David, a well-known figure in the B. C. lumber industry, is negotiating for the purchase of the Colonial Company's assets, for a Seattle syndicate, who are anxious to enter the pulp and paper industry in B. C. The Colonial shareholders passed a resolution to sell to Mr. David under conditions which call for immediate commencement upon the erection of a pulp mill and the development of the pulp and water concessions. An injunction to restrain the sale is being asked for by Messrs. Whalen Bros., of the B. C. Sulphite Fibre Company who claim that they have a prior agreement with the Colonial Company which would be endangered by the sale.

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914-15 cut.

Merchantable 1 x 4 x 10/13
Merchantable 1 x 5 x 10/13
Merchantable 1 x 6 x 10/13
Merchantable 2 x 4 x 10/13
Merchantable 2 x 5 x 10/13
Merchantable 2 x 6 x 10/13
Merchantable 2 x 7 x 10/13
Merchantable 2 x 8 x 10/13
Merchantable 2 x 10 x 10/13

all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60% 12 and 13 ft.

First Quality and Clear Spruce

1 x 4 in. up x 6/13—'15 cut.

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13 3 in. x 9 in. x 10/13

60% Sawn May and July, 1915.

200 M. ft. 50% Best End of S. C. Pine, 1 x 4/6 x 6/11
175 M. ft. M. C. Pine 1 x 4/7 x 12/13
350 " " " 1 x 4/7 x 14/16
200 " " " 1 x 8up x 12/13
600 " " " 1 x 8up x 14/16
200 " " " 1 x 12 x 6/11
250 " " " 1 x 12 x 12/13
750 " " " 1 x 12 x 14/16

All F.O.B. Cars or Boat Ottawa.

1,000,000 pcs. Mill Run Spruce Lath 4 ft. x 1⅜ x ⅜—'15 cut.
500,000 pcs. No. 2 & 3 W. Pine Lath, 4 ft. x 1¼ x ⅜—'15 cut.

Write to-day!

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in sealed packets. The flavour is preserved and for convenience they are far superior to open chests or large tins.

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TEA

is packed in sealed aluminium packets and is always fresh and fragrant. Splendid flavour and goes furthest.

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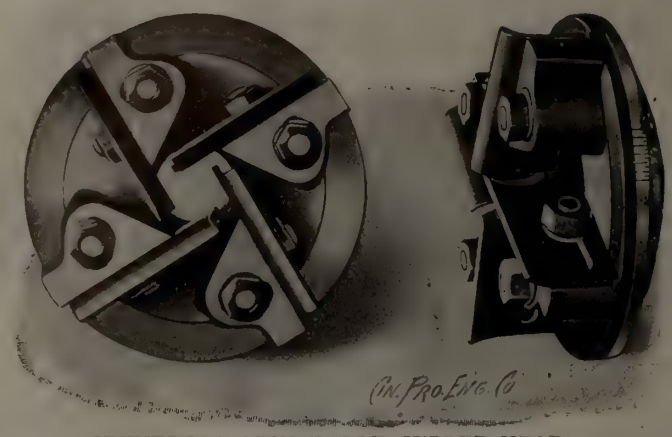


UNIVERSAL ADJUSTABLE CUTTER HEAD.
Patented. Infringements (maker or user) will be vigorously prosecuted.

Two Heads

that have put 100% more profit in the production of Dowel Stock.

W. S. HAWKER
Inventor and Designer of the World's most efficient Tubular Turning Machinery.

WORK YOUR WASTE INTO PROFIT

The Money Maker Adjustable Rod and Dowel Machine

The machine that is sent under a guarantee to show you a gain of from 100 to 400 per cent. before you buy it.

The improved dowel machine that 90 percent of the largest and oldest machinery builders and dealers now endorse and recommend in preference to the solid chuck machines they themselves previously built.

One cutter head turns from ¼-in. to 2-in. diameter.

Turns hard or soft wood equally well.

Handles heavy, oversized squares.

No choking of the cutter head.

Smooth stock.

Accurate sizes.

Works stock as short as five inches.

Rolls automatically center variations in squares.

Machines built to turn from ⅛ to 6-in.

We want to hear from every user of a solid chuck dowel machine.

We can save you from one dollar out of every two, to four out of every five that the operation of solid chuck machines cost you.

Engagements for competitive test solicited.

Formal orders not solicited. All sales made after demonstration.

The only question is, are you willing to cut cost of your dowel turning to one-half or one-third of what it costs with any make of solid chuck machine?

Machine delivers the goods before you buy.

State conditions of stock closely.

Special conditions require special equipment.

W. S. Hawker Manufacturing Company

DAYTON, OHIO

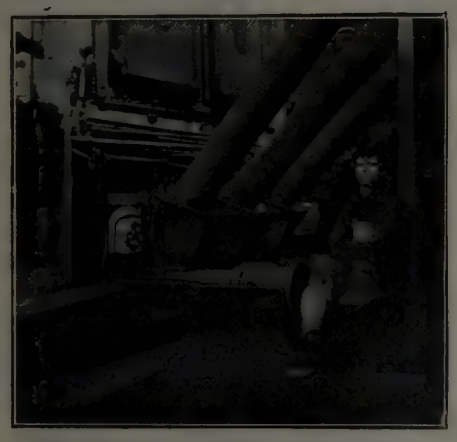
BURN

Your Saw Mill and Paper Mill Refuse

in our

Special Jones Underfeed Stoker Dutch Oven

and increase your profits.



SHOULD your **supply of refuse** run short from any cause at any hour of the day or night you still have an equipment that will at once change over without dropping the steam pressure and burn coal alone more efficiently than coal can be burned by any other system of firing.

Our stokers are installed in many of the most modern pulp and paper mills throughout Canada and the United States using a system combining the burning of mill refuse in conjunction with a small proportion of coal and are giving excellent results. If you have refuse to dispose of or if you depend on coal alone to fire your boilers the addition of a JONES UNDERFEED STOKER will make an enormous cut in your costs for steam.

PARTIAL LIST OF USERS

	Boiler H.P.
Cleveland Sarnia Saw Mill Company, Limited, Sarnia	1,200
St. Lawrence Pulp & Lumber Corporation, Chandler, P.Q.	3,000
E. B. Eddy Company, Hull, P.Q.	2,700
Kinleith Paper Company, St. Catharines, Ont.	450
Abitibi Pulp & Paper Company, Limited, Iroquois Falls, Ont.	1,672
Edwin Crabtree & Sons, Limited, Crabtree Mills, P.Q.	300
Minnesota & Ontario Power Company, Fort Frances, Ont.	1,533
Minnesota & Ontario Power Company, International Falls, Minn.	2,400
Mullen Bros. Paper Company, St. Joseph, Mich.	550
Traders' Paper Company, Lockport, N.Y.	800
Brown Paper Company, Fort Madison, Ia.	300
Hollingsworth & Whitney Company, Waterville, Me.	4,650
West Virginia Pulp & Paper Company, Covington, Va.	2,750
West Virginia Pulp & Paper Company, Williamsburg, Pa.	2,500
West Virginia Pulp & Paper Company, Mechanicsville, N.Y.	6,600
West Virginia Pulp & Paper Company, Tyrone, Pa.	2,140
Dells Paper & Pulp Company, Eau Claire, Wis.	1,800
Monroe Binder Board Company, Monroe, Mich.	600
Case Bros., Highland Park, Conn.	450
Rhinelander Paper Company, Rhinelander, Wis.	1,500
Ticonderoga Pulp & Paper Company, Ticonderoga, N.Y.	2,460
J. & J. Rogers Company, Ausable Forks, N.Y.	1,637
Mead Pulp & Paper Company, Limited, Chillicothe, O.	2,000
Carthage Sulphite, Pulp & Paper Company, Carthage, N.Y.	1,100
Lawrence Paper Manufacturing Company, Limited, Lawrence, Kan.	600

Arrangement of Jones Underfeed Stokers in Dutch Oven for burning paper mill refuse in conjunction with coal.

Jones Underfeed Stoker Co., Limited

National Trust Building, TORONTO

Bain Sleighs for Logging Operations

Famous for their great Capacity and Light Draft

Logging is a severe test of a sleigh.

It pays to buy the best, even though you may pay considerably more than for one which possibly may appear to be just as good.

It is only by actual test—the test of time and hard usage—that the difference is apparent, and the increased first cost is forgotten. **The quality is remembered long after the price is forgotten.**

The cross chain couplings allow great flexibility and the hind bob follows in the tracks of the front when turning. Some prefer the short reach for well broken roads, as a sleigh so fitted can be backed same as a wagon.

Swing bunks are an advantage in the bush, as they can be swung parallel with the runners when driving without a load.

Any of these sleighs except the heavy sloop can be fitted with 38, 40 or 42 inch bolsters for general work.

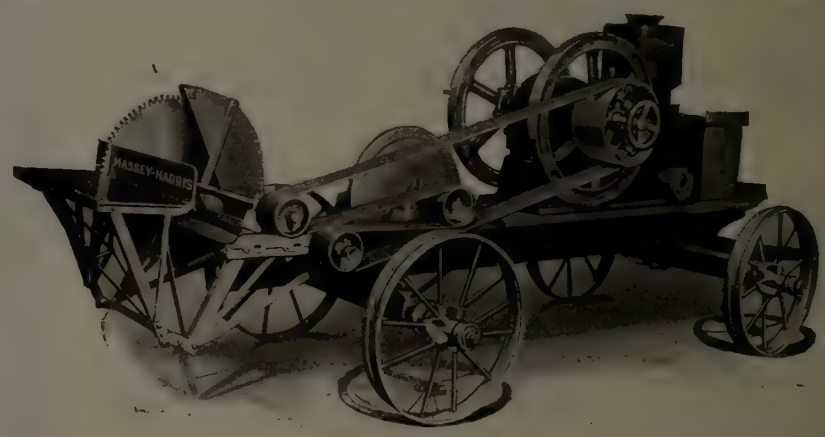
Our new catalogue No. 33 tells all about it and is yours for the asking.

The Bain One-Beam North Shore Sleigh

Steel Shoes; Swing Bunks or Bolsters; Cross Chain Coupling; 2 ft. 10 in. or 3 ft. Track. Clearance under Beam 9½ inches.

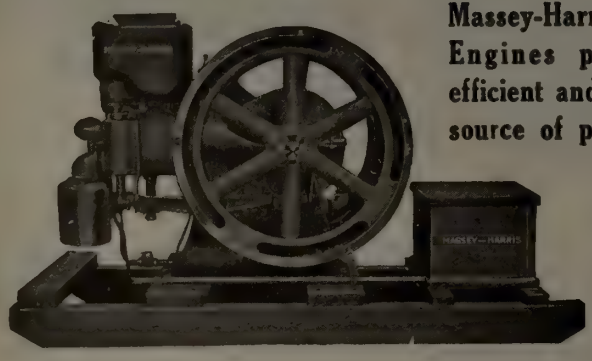
The Bain Heavy Sloop Sleigh

Steel Shoes; Short Reach or Cross Chain Coupling; Furnished without Bolsters but with king bolts front and rear; 3 ft. 4 in., 4 ft. 4 in. or 4 ft 8 in. Track. Clearance under Beam 7 inches.



Massey-Harris Saw Rigs

Stationary or Portable; 20 to 30 inch blades. For cutting cordwood. pulpwood or poles. Descriptive circular tells all about their many points of superiority.



Massey-Harris Gasoline Engines provide an efficient and economical source of power. 1½ to 20 H. P.

Stationary, Portable or Semi-Portable.

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Branches at Montreal, Moncton, Winnipeg, Regina, Saskatoon, Yorkton, Swift Current, Calgary, Edmonton

Please mention the Canada Lumberman when writing

Shell Box Saws

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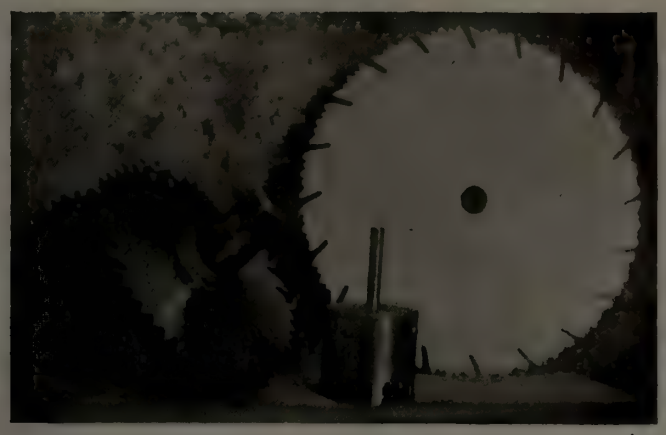
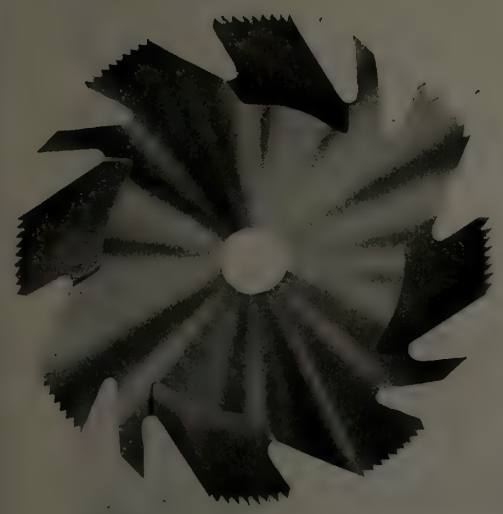


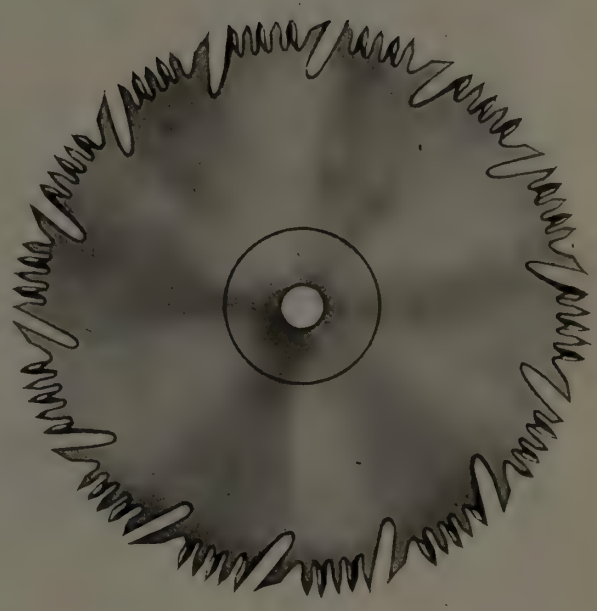
Aloxite Saw Gumming Wheels

Hoe Bits and Shanks



Special Groover
for cutting with or across the grain.

The above illustration shows three Radcliff specials for shell box work. On the left is shown dado-head, in the centre special cylinder for cutting holes in the shell box trays; this saw is fitted with a spring to eject the core. On the right is a combination tooth planer saw.



Round Face Groover
for cutting channel for rope handles in cleats.

Hollow Ground Planer or Mitre Saw

These Saws will cut with or across grain with a smoothness that makes further finishing unnecessary.

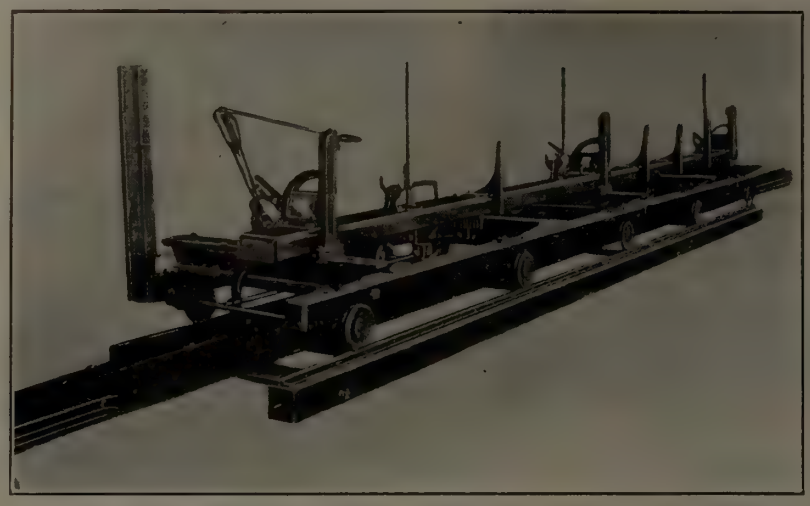
Write us for prices on these labor-saving saws.

Radcliff Saw Mfg. Company, Limited

550 Dundas St. - TORONTO, Ont.

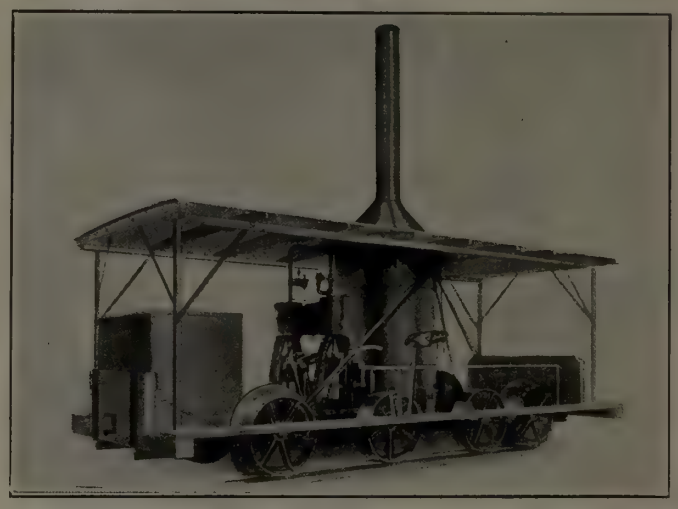
Agents for L. & I. J. White Company Machine Knives

The OXFORD Line
of Sawmill Machinery



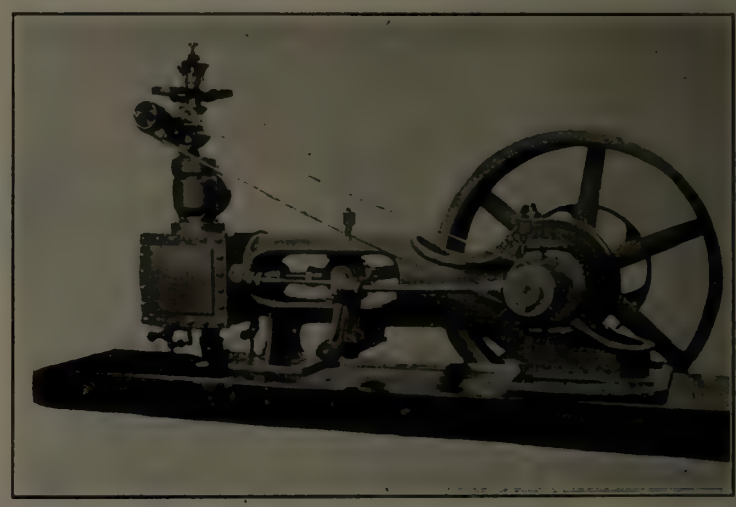
20 FOOT ORDINARY FRAME CARRIAGE, WITH 5 LOG SEATS, WITH 3 SLIDES—Built in many sizes to suit purchasers.

OXFORD BOARD AND DEAL GAUGE (RIGHT HAND)—We also make left hand for left hand carriages. Notice extra roll—when this is set to saw a board, to set for deal simply swing this roll back, so large roll comes in contact with deal, then with the lever you can set roller to saw any thickness in ¼-in. from 0 to 6 in. These gauges supplied on all our portable mills.

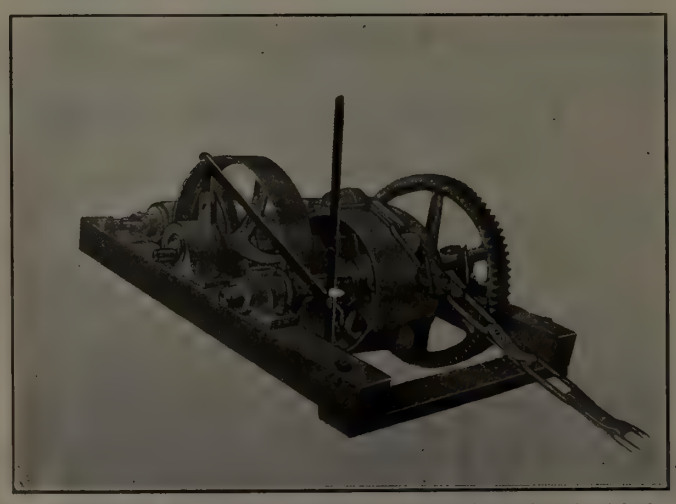


OXFORD TRAM ROAD ENGINE—Runs on sawn wood rail 4 x 4 Hardwood or 4 x 6 Softwood. In winter, put a set of creepers on wheels, these are furnished. Steamer is under the control of driver, gasoline has to be stopped to reverse. In steamer the reversing lever will almost instantly stop or reverse motion of car, no troublesome gearing. Customer who used both says: "Cost of fuel for the gasoline was over four times as much as for steamer."

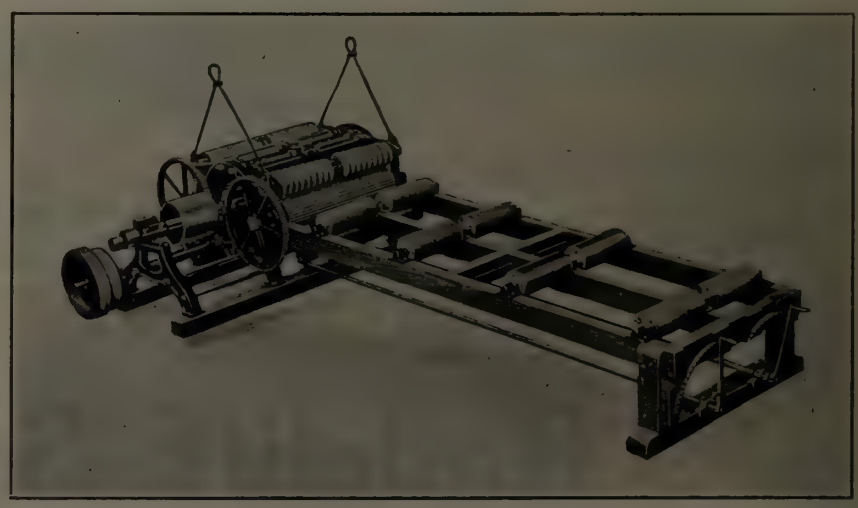
Machine weighs about eight tons. A machine of this kind has hauled 20 thousand sup. feet of lumber up 5 per cent. grade. 20 M. feet of timber with eight trolleys would weigh about 35 tons.



NEW MODEL HORIZONTAL ENGINE—Advantages:—Main bearing sets nearer vertical which brings adjustment now in line with the wear. Main bearings adjusted with taper key, and screws can be adjusted while engine is running. Balanced crank which permits of high speed without vibration. Main pulley has split hub, rim of wheel sits over bearing about 4 inches which brings strain of belt direct on bearing. Shaft and bearings are heavy enough to put trimmer pulley on with large pulley, thus getting trimmer belt out of fireman's way.



ENDLESS HAUL UP; geared and friction with 30 inch by 4 inch face gear, 6 inch by 4 inch face pinion, 30 inch by 6 inch face cast iron friction, 6 inch leatherboard friction, pulley sprocket 21 inch by 14 inch with forged lugs, eccentric box and iron lever, for use with our forged chain with steel or cast iron carriers.



HEAVY DOUBLE EDGER—This Edger will edge for a gang on one side and rotary on the other, cutting any different thickness of stock on either side, and going through Edger at same time. Built with variable friction feed if required. Also resawing attachment.

WRITE US FOR PARTICULARS

Oxford Foundry & Machine Co., Limited, Oxford, N. S.

SHELL C.M.C. BOX MACHINERY

WE are Designers and Builders of the only 18 Spindle Boring machine built in Canada suitable for shrapnel boxes.

We make a specialty of 18 spindle, 6 spindle, 4 spindle and 2 spindle machines, and a 5 spindle head suitable for any vertical borer for boring cleates.

We also make Dado machines, Dovetail machines, Clamping machines and Cut-off Saws specially designed for shell boxes.

If you require any special machinery for this purpose send us your specification.

Canada Machinery Corporation
Limited
Galt, Ontario
Builders of Modern Woodworking Machinery

ONE HUNDRED THIRTY-SIX

Packard

TRUCKS ARE USED BY NINETY-SEVEN LUMBER DEALERS IN 73 CITIES

They find Packard speed and reliability invaluable in carrying materials and supplies over long routes, to buildings going up in the outskirts of the town, in the suburbs and in the surrounding country.

PACKARD NEW TYPE CHAINLESS TRUCKS are built in seven sizes—1, 1½, 2, 3, 4, 5 and 6-ton units—with special chassis lengths and speeds to meet the work in hand. They may be had with roller bodies, which greatly expedite loading and unloading, and they constitute the only complete line of silent, up-to-date chainless motor trucks on the market. Send for catalog.

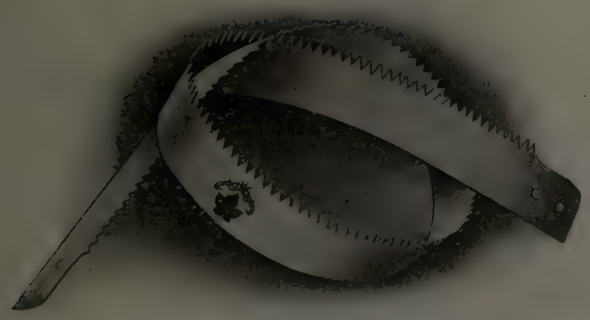
ONTARIO MOTOR CAR COMPANY, LIMITED

18 Bloor St. East, Toronto, Ont. 41 Queen St., Ottawa, Ont.

No. 66 Cross Cut Saw

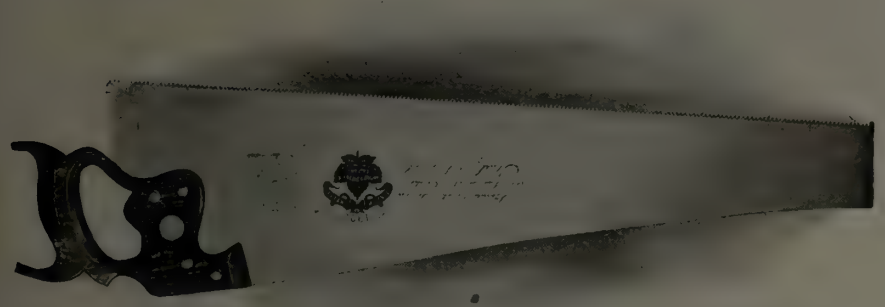
There is Lasting Quality in All

MAPLE LEAF SAWS



Maple Leaf No. 121 Swedish Web Saw

Circular Saw



1900 Hand Saw

This is due to our **Secret Process** of tempering the fine razor steel which is manufactured exclusively for us. This refines and toughens the raw material to such an extent that MAPLE LEAF SAWS will stand up under the most severe tests and last longer than any other saw on the market.

Why not buy Made-in-Canada Maple Leaf Saws when you can get goods of **superior quality** made by a strictly Canadian firm, employing Canadian workmen and supported by Canadian capital?

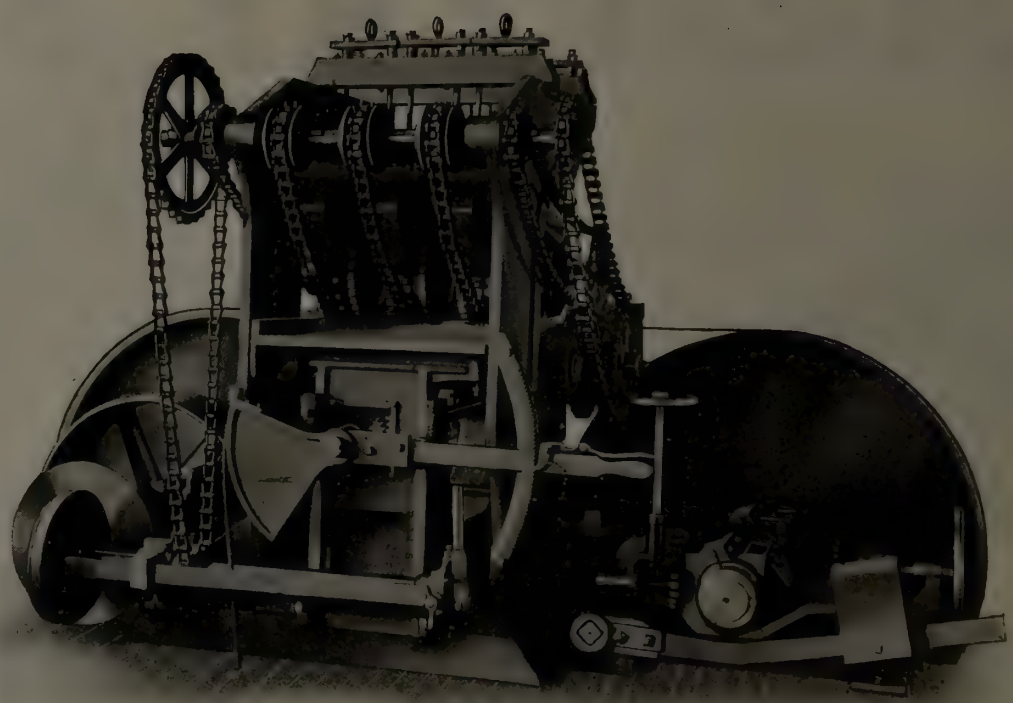
Every saw manufactured by us is fully guaranteed.

Shurly-Dietrich Company, Limited, Galt, Ont.

1642 Pandora Street, Vancouver, B. C.

No. 44 Cross Cut Saw

Box Factory and Saw Mill Machinery



Automatic Hopper Feed Machines

Re-saws
Squeezers
Equalizers
Recessing Machines

Box Board Matchers

Cut-off and Rip Saw Tables

Horizontal Re-saws

Vertical Re-saws

Short Lumber Edgers

Short Lumber Trimmers

Catalogue gladly mailed upon request.

Mereen-Johnson Machine Co.

Minneapolis, Minn., U. S. A.

PRATT & WHITNEY CO.
OF CANADA, LIMITED

SMALL TOOLS

Taps — Dies — Reamers — Cutters — Drills

MADE IN CANADA

As good as money can buy—Guaranteed absolutely!

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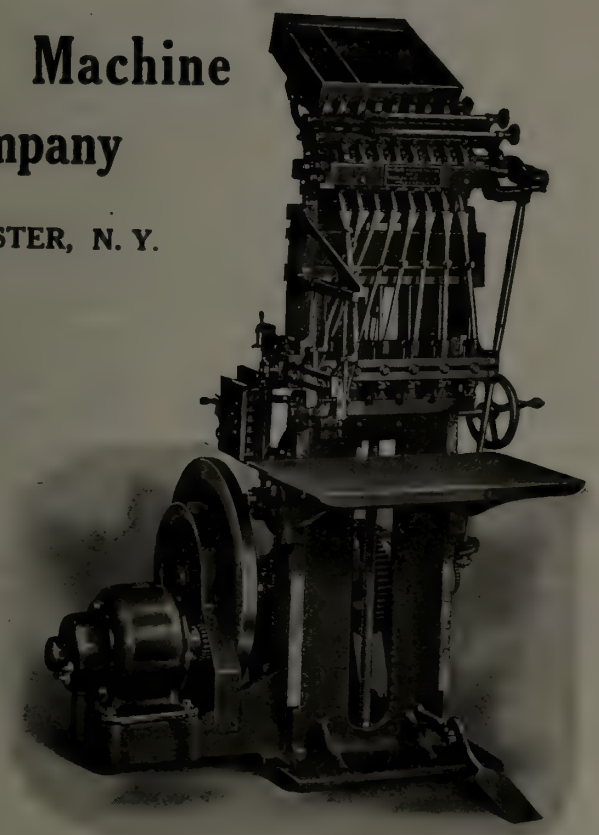
GALT, ONTARIO

MANUFACTURING WOODWORKING

Machine Knives, Circular Cutters and Mortise Chisel

Morgan Machine Company

ROCHESTER, N. Y.



Manufacturers of—

Nailing Machines,

Lock Corner Box Machinery,

Box Board Matchers,

Box Board Printing Machines.

Every manufacturer of boxes; every manufacturer who has nails to drive in any article, or packages of any kind to manufacture, should write the **Morgan Machine Company** for latest developments in machinery for the Box Industry.

Morgan Machine Company
ROCHESTER, N. Y.

Garlock Packings

Are made in over two hundred styles and combinations to meet every known requirement. We will assume entire responsibility in selecting the proper styles and combinations of our packings to work successfully and economically under any stated condition; and it goods are not wholly satisfactory to purchaser we will refund promptly the cost of same. A card will bring our new catalog which fully describes our various styles of packings.

Style No. 777

Style No. 150

The Garlock Packing Co.
Hamilton, Ontario

Branches:
Calgary
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Toronto
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Keiths LIMITED

TORONTO and MONTREAL

— effect —

Automatic Sprinklers

Safety — Economy

Write us for information

Head Office: 297 Campbell Ave., Toronto

Quebec Office: 707 New Birks Bldg., Montreal

Associated Automatic Sprinkler Head.

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa,
December 20th, 1912.

Deputy Minister.

Province of Quebec

Timber Lands

License or permission to cut timber on public lands in this Province is acquired at public auction, after due notice has been given, subject to a yearly ground rent of $5 per square mile, and is renewable annually, provided the licensee shall have complied with the regulations.

The timber cut in virtue of such license is subject to a tariff of dues fixed by order in council.

The present rate of ground rent and tariff dues shall not be increased until the 1st of September, 1920.

Licensees are forbidden to cut on Crown lands trees less than a fixed diameter.

The Regulations also provide that all timber cut on Crown lands must be manufactured in Canada.

In the event of a licensee wishing to transfer his rights, he is at liberty to do so under certain conditions, namely, the paying of a fee of $4 per square mile.

There are at present time about 75,000 square miles of forest lands under license and over 150,000 miles in the possession of the Crown.

Water Powers

To obtain authorization for the utilization of a Water-Power in the Province of Quebec, application should be made to the Honourable Minister of Lands and Forests.

Water-Falls capable of developing over 200 H.P. are granted under emphyteutic leases, the conditions of which are upon the following lines:

1.—Duration of the lease, from 25 to 99 years, according to the importance of the water-power and to the amount of capital required for its development.

2.—Payment of a yearly rental which does not vary during the term of the lease, for the land granted, counting from the date when the contract was signed.

3.—An additional yearly charge of from 10 to 35 cents per H.P. developed according to the geographical situation of the site of the water-power; such charge being payable from the time the power is produced.

4.—The above charge is subject to revision every 21 years counting from the signing of the contract.

5.—Delay of 2 years for beginning works and 2 further years for producing power.

6.—The lessee to make a deposit in money or in securities as a guarantee of good faith of the carrying out of the contract. Such deposit may be forfeited if the conditions are not fulfilled; but it may be repaid after a certain time, in the contrary case.

7.—Lastly, the grantee must submit plans of his works, mills, etc., to the Department previous to their installation and when such installation is completed, he must keep the Department informed as to the quantity of power produced.

Department of Lands and Forests
of the Province of Quebec

Elz. Miville Dechene,
Deputy Minister

CLIMAX Improved Geared LOCOMOTIVES FOR WOOD AND IRON RAILS

A 62-ton Climax Locomotive Designed Especially for Heavy Logging Work.

Climax Locomotives are successfully operated on steep grades and sharp curves. Any weight or gauge. Locomotives in stock for immediate shipment. Get Catalog "H."

CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.
VANCOUVER MACHINERY DEPOT, LTD., VANCOUVER, B.C.

DETACHABLE

Lumber Trucks

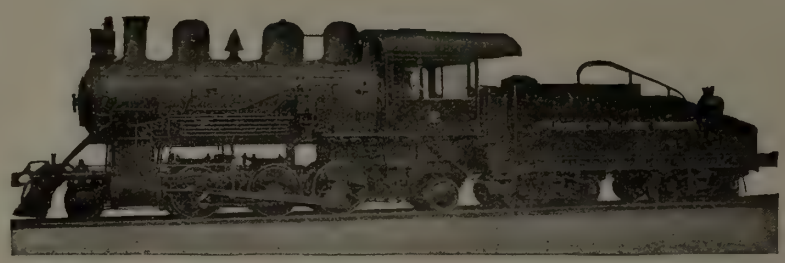
For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East TORONTO

LOGGING LOCOMOTIVES



Best results are obtained from a locomotive only when designed and built to meet special service requirements.

Our standard logging locomotives were designed after a careful study of the conditions under which they must operate.

Every piece of material entering into their construction must undergo a thorough test and conform to the same specifications required for the largest locomotives. Only the best materials are used, insuring long life and satisfactory results.

Write us when you want a locomotive.

MONTREAL LOCOMOTIVE WORKS, LIMITED,

DOMINION EXPRESS BUILDING, MONTREAL, CANADA.

AJAX LOADING CHAIN

offers the greatest strength in the smallest chain. The overlapped swelled weld gives a factor of safety which cannot be overlooked. Our steel, too, is of the highest quality, and high in tensile strength and elasticity.

For The Man Who Wants Real Chain Service

AJAX Loading Chain and Standard Conveyor Chain

offer a high mark of quality hard to equal.

Made by

Standard Chain Company
Pittsburgh, Pa.

Montreal
Alexander Gibb, St. Nicholas Bldg.

Winnipeg
Bissett and Webb

We make a Specialty of

Conveyor Chains

For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

Caldwell's Molasses Meal

The Ideal Food For Camp Horses

Because it contains the proper amount of sugar necessary for hard working horses.

Because it replaces expensive cereals and gives better results.

Because it is easily handled, requires no diluting with water and prevents waste.

Because it keeps the horses free from colic, intestinal disorders and worms.

Write us for prices. Caldwell's Molasses Meal is a profitable feed investment.

Caldwell Feed & Cereal Company, Limited

Dundas, Ont.

Logging Locomotives

Made in Canada

Our fifty years' experience in the design and manufacture of of logging locomotives is at your disposal. Many of the largest logging operators in Canada are using our "Canadian Made" locomotives.

Our logging models are as carefully designed and built as our 200 ton sizes—oil or coal burning.

MAY WE SEND YOU SPECIFICATIONS?

This engine is 13½ ins. x 18 ins. and weighs 35 tons.

Canadian Locomotive Company, Limited, Kingston, Ont.

Taylor and Arnold Ltd., Sales Agent, Montreal and Winnipeg

"Brazel Patent" SNOW PLOWS

Known in every Camp from the Atlantic to the Pacific as the most satisfactory Snow Plow made.

Combination Model, Lumberman's Snow Plow, can be used either with or without Rut Cutter.

One man to operate. Adjusting wheels close together make change for light or heavy work in an instant. Wings placed to throw snow 9 ft. wider than sleigh track or narrower if desired. Height of mouldboards prevent snow falling back on track. BRAZEL PLOWS cut 6 in. wider than logging sleighs, roll snow outside track and away from roadway. Cut off knolls, fill up holes and leave a perfectly level road. Cut off dirt and manure heaps from an ice road leaving a clean roadbed. Roll up and push entirely away from the road, 12 inches of loose snow each time the plow passes over.

THE BATEMAN-WILKINSON CO., LIMITED
300 Symington Ave., Toronto, Can

Successors to THE WILKINSON PLOUGH CO., LIMITED
Catalogue and prices on application

TORONTO, CANADA

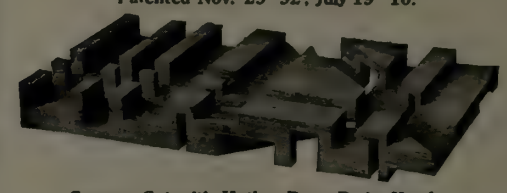
J. J. TURNER & SONS
PETERBOROUGH, ONT.

Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

Patented Nov. 29 '92; July 19 '10.



Grooves Cut with Huther Bros. Dado Heads

Fits Any Saw Mandrel

A Huther Bros. Dado Head consists of two outside cutters and enough inside cutters to make the required cut. This Head will cut perfect grooves, with or across grain, any width. It is an easy Head to keep in perfect condition, has a simple quick adjustment, and may be enlarged any time after purchase. Sent on approval and if not satisfactory return at our expense.

Write for New Illustrated Catalog.

HUTHER BROS. SAW MFG. COMPANY, Inc.
1103 University Ave.
ROCHESTER, N. Y.

National Oats

Clean Western Oats, in bulk or in strong, well sewn bags; especially suited for Camp Use.

National Elevator Co., Ltd.
Oat Specialists
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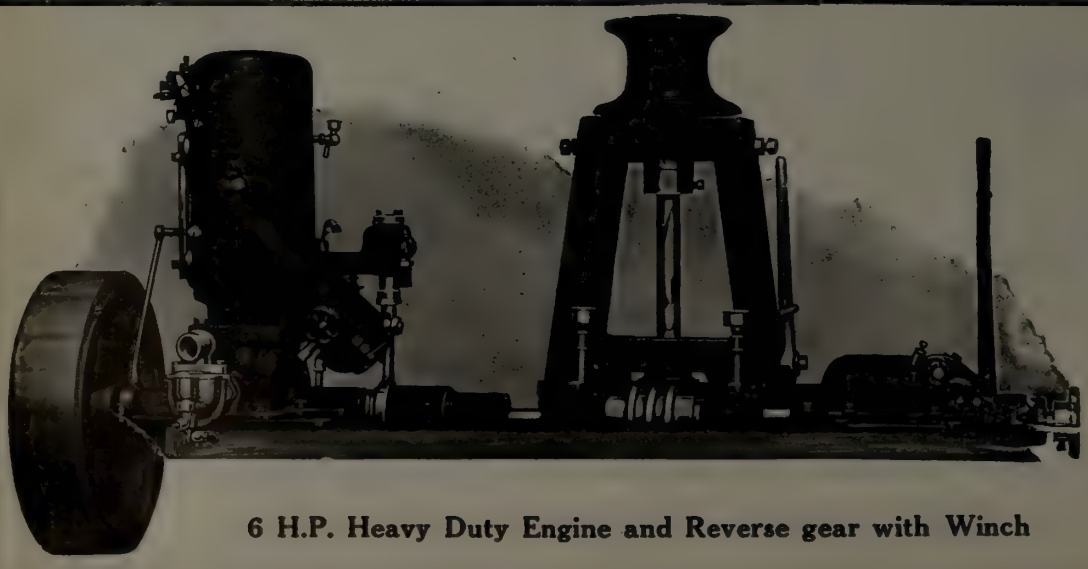
New **RAILS** Relaying
12 to 80 pounds per yard.

LOGGING CARS

Jno. J. Gartshore
58 Front St. West, Toronto

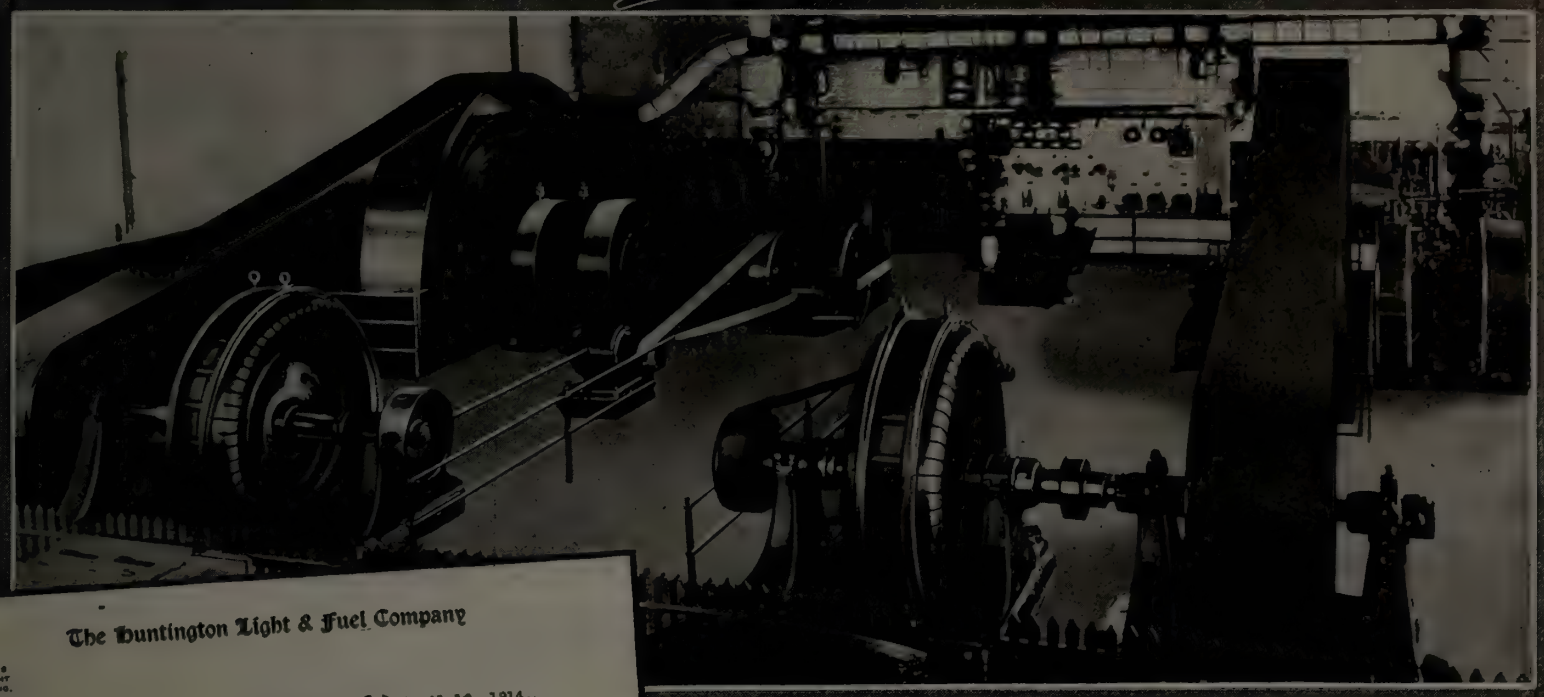


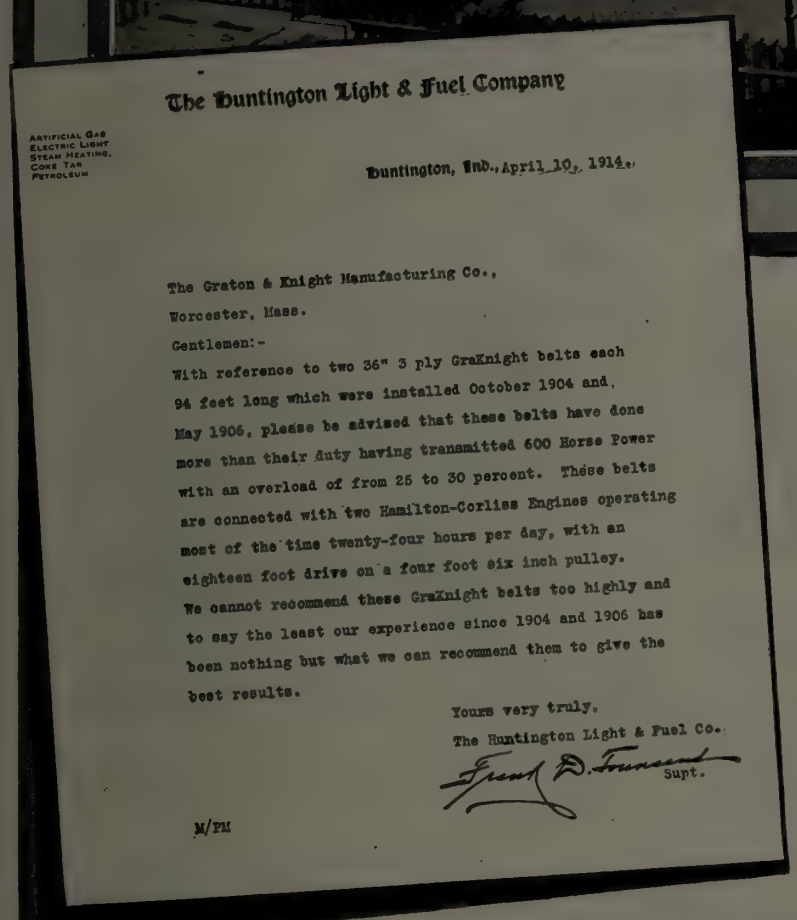
6 H.P. Heavy Duty Engine and Reverse gear with Winch

River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.





The Huntington Light & Fuel Company

Artificial Gas
Electric Light
Steam Heating.
Coke Tar
Petroleum

Huntington, Ind., April 10, 1914.

The Graton & Knight Manufacturing Co.,
Worcester, Mass.

Gentlemen:-

With reference to two 36" 3 ply GraKnight belts each 94 feet long which were installed October 1904 and, May 1906, please be advised that these belts have done more than their duty having transmitted 600 Horse Power with an overload of from 25 to 30 percent. These belts are connected with two Hamilton-Corliss Engines operating most of the time twenty-four hours per day, with an eighteen foot drive on a four foot six inch pulley. We cannot recommend these GraKnight belts too highly and to say the least our experience since 1904 and 1906 has been nothing but what we can recommend them to give the best results.

Yours very truly,
The Huntington Light & Fuel Co.
Fred D. Townsend Supt.

M/FM

Economy in Power Transmission

Interests Every Manufacturer Today as Never Before

The accompanying letter is evidence of the degree of economy being realized from the use of G & K Belting. The two 36" belts referred to are still in excellent condition, transmitting the same amount of horse-power and giving the same satisfactory service as heretofore.

There is a G & K belt for every drive and every condition of service and its use means "Economy in Power Transmission."

To assist you to determine the particular grade of G & K belting best adapted to your requirements, we maintain an extensive Engineering Department fully equipped to analyze any type of drive or any installation, and recommend the grade of belting from which you can derive the greatest economy.

This service is gratis to all belting users. It will assist you toward greater "Economy In Power Transmission." May we serve you?

The Graton & Knight Manufacturing Co.
Oak Leather Tanners and Belt Makers
Worcester, Mass., U.S.A.

The Canadian Fairbanks-Morse Co., Limited
St. John Toronto Quebec Hamilton Montreal Ottawa Vancouver Victoria

1851 GRA KNIGHT TRADE MARK REG U.S. PAT. OFF.

S. & H. Borbridge

Ottawa, Ont. **Brandon, Man.**

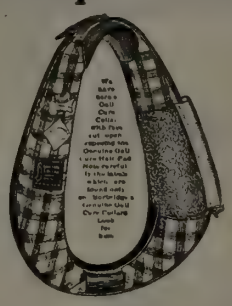
—Manufacturers of—

Harness, Horse Collars, Horse Blankets and Moccasins

for the Lumber Trade

Maple Leaf Kanthurt Horse Collars

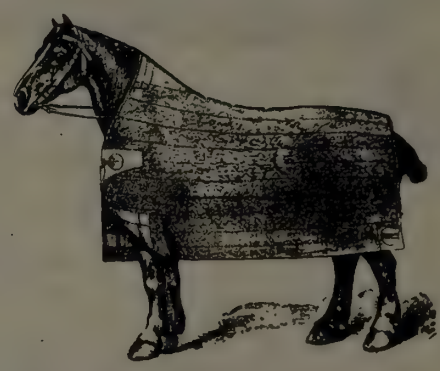
(PATENTED)



These collars will not hurt your horses' shoulders.

No. 62 Lumber, Hogskin Face, $37,00 doz.

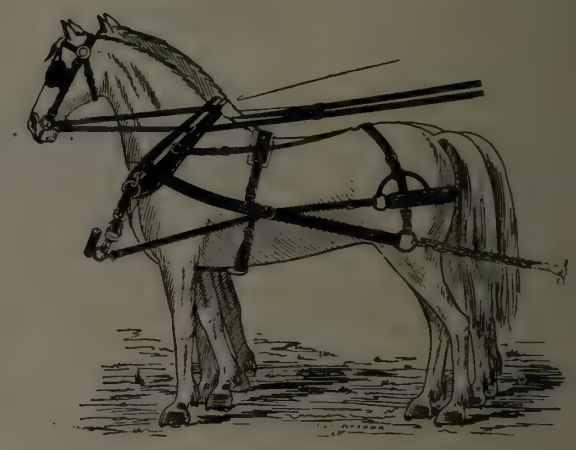
Saddlery and Moccasins



No. 10 Jute Blanket

6 ft. 6 in. long, 80 in. wide, 60 in. lined, made square with gusset and shaped at rump. Weight 13 lbs. 6 oz.

Leather Leg Strap extra. A full line of Horse Blankets for lumbermen's purposes. Write for catalogue and price list.

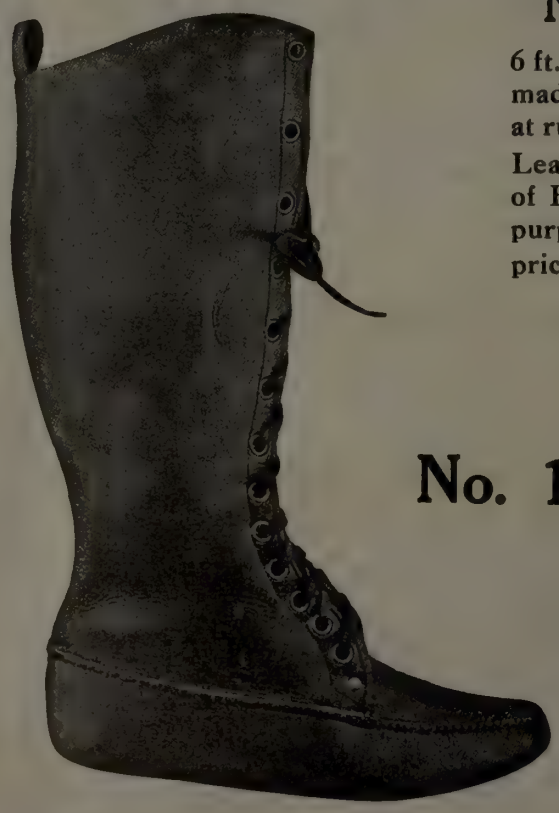


Michigan Lumber Harness

made in 2 in., 2¼ in., 2½ in., 2¾ in. trace. A full line of Lumbermen's Harness for all sections.

Write for catalogue.

You are Never in Doubt when you Buy of Borbridge.



Patented 1911

No. 152 Long Leg Seamless Heel Draw String Moccasins

The latest improvement in Moccasins doing away with all seams at heel. Under the old method the heel would come down and in a short time the wearer would be walking on it, wearing out the stitching, thus causing it to leak and rip. With the new process the heel will not flatten out, will always keep its shape and there are no seams whatever, making a clean smooth Ripless and Waterproof heel. Made only in the highest quality, all heights of leg, with or without soles or heels.

WRITE FOR CATALOGUE AND PRICE LIST.

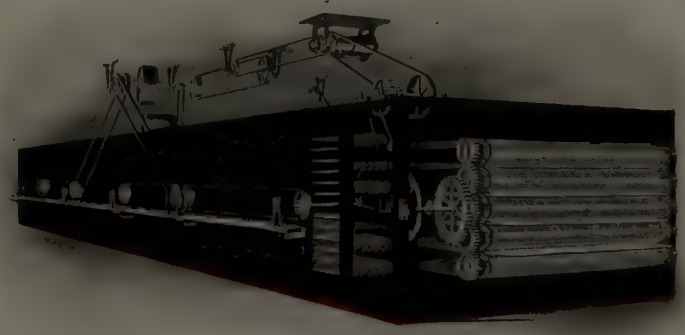
You are never in doubt when you buy from Borbridge. We have been dealing with the lumbermen of Canada for over three quarters of a century.

DRYING VENEERS

is one of the most important operations of veneer manufacture. The old method of drying in racks is too slow, and requires too much floor space and labor for handling.

THE "PROCTOR" VENEER DRYER

is an evolution of the rack drying method with the disadvantages eliminated. The **"Proctor"** Dryer is automatic and requires very little floor space, labor, and time for the operation. Veneer is dried by tremendous circulation of warm air.



Send for Catalogue 21 and list of eighty users.

THE PHILADELPHIA TEXTILE MACHINERY CO.
PHILADELPHIA PA.

12 Highest Awards

including

4 Grand Prizes

Panama-Pacific International Exposition

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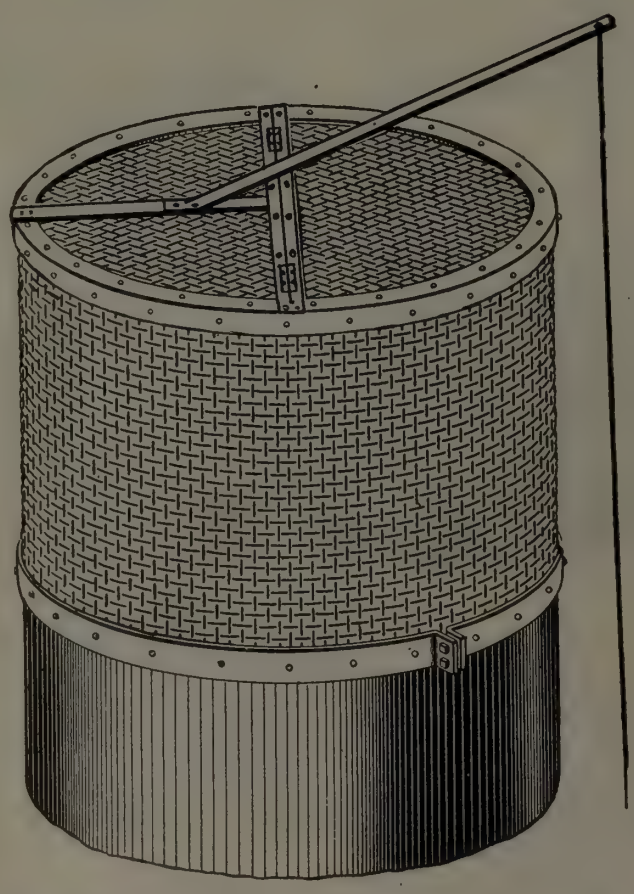
DISSTON

Saws Tools Files

HENRY DISSTON & SONS, LTD., TORONTO, ONT.



Don't Invite a Fire

Equip Your Mill with

A Spark Arrester

Prevention is better, and less expensive, than cure. Apply this to your mill and take the precaution of placing a spark arrester on your stack.

Our spark arrester is substantially built and will last for years. Don't wait until a fire has visited your property—equip your mill at once.

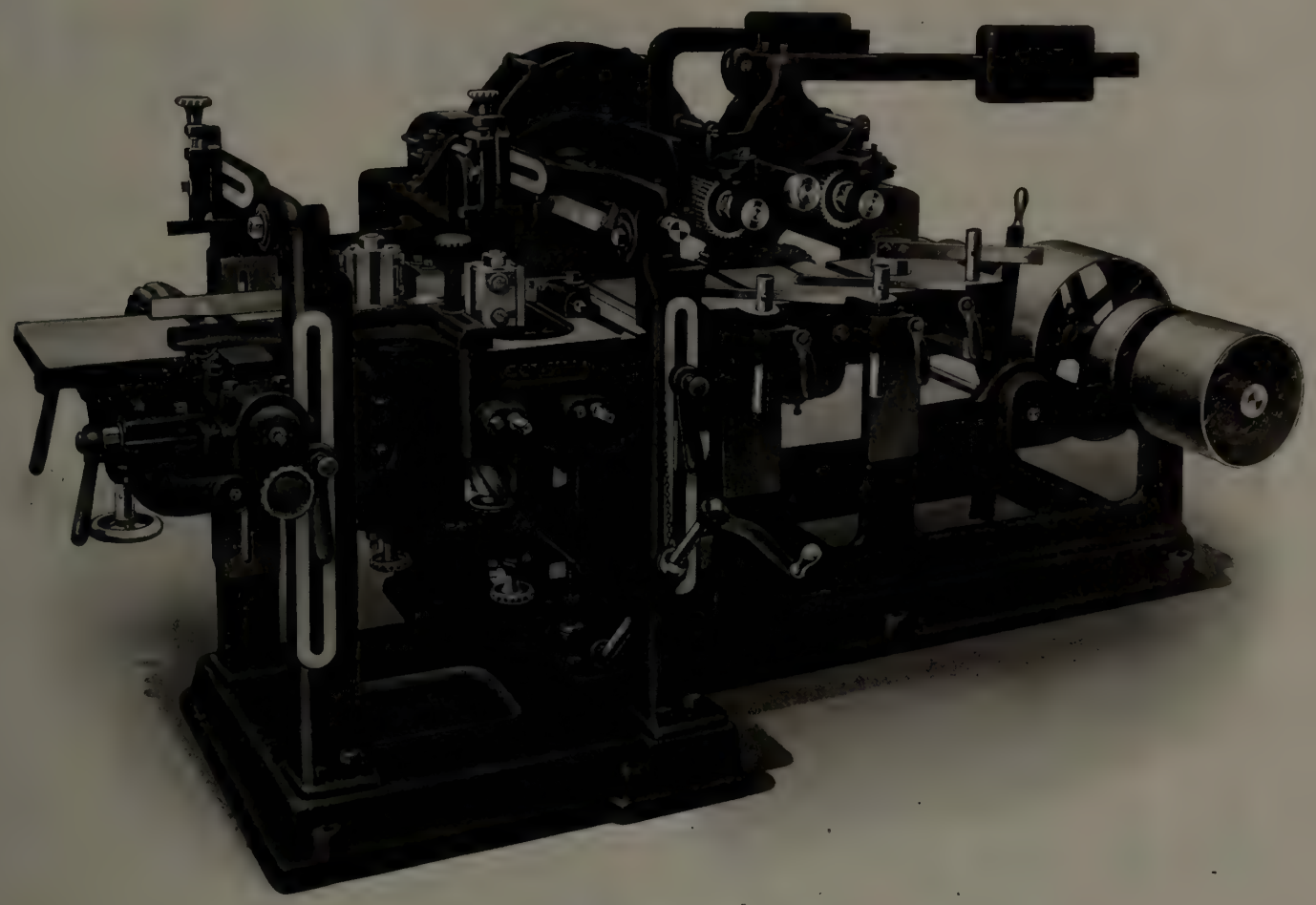
Our spark arresters and refuse burners are noted fire preventers and should be used in every woodworking factory, saw and planing mill.

We are making Bands for Ammunition Boxes
Write us When in need of Machinery Guards
Inquiries Solicted

Canada Wire & Iron Goods Co., Limited

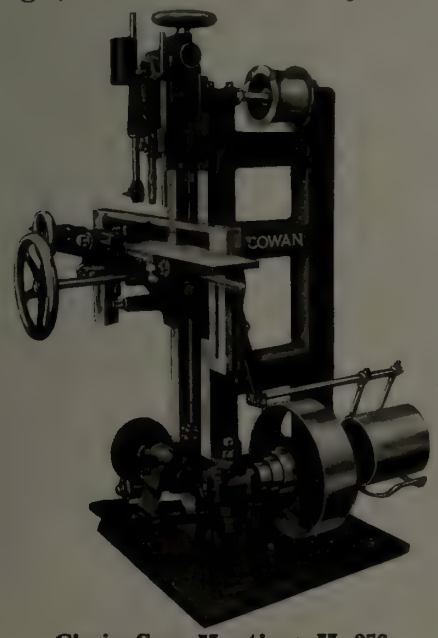
HAMILTON, - ONTARIO

High Quality Woodworking and Box Making Machinery



8′ Four Side Moulder M. 217.

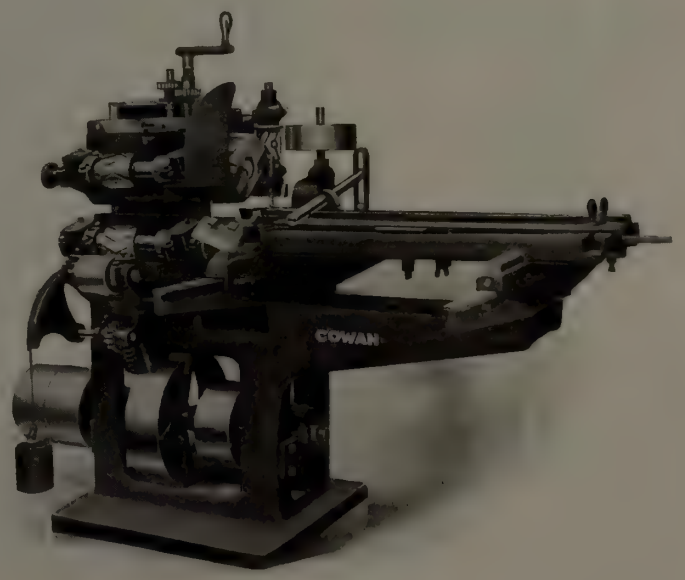
We build moulders, all sizes, suitable for all kinds of heavy or light work and are unequalled for design, convenience of adjustment and easy operation.



Chain Saw Mortiser M. 256.

The only way to do mortising at a profit is with a chain saw mortiser.

Our tenoner is a good mate for the chain saw mortiser.



Tenoner M. 224.

We manfacture machines for Planing Mills, Sash, Door, Furniture, Carriage and General Woodworking Factories. Also special machinery for Ammunition Boxes and Portable Houses. Your inquiries solicited.

Cowan & Company of Galt, Limited

Galt, Ontario, Canada

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:

1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better ..	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better ...	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing ..	27 00	29 00
1 x 8 common and dressing ..	27 00	29 00
1 x 10 common and dressing..	31 00	32 00
1 x 12 common and dressing..	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common.	25 00	26 00
1 x 12 inch box and common..		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00

Hemlock No. 1:

1 x 4 and 5-in. x 9 to 16 ft. ...	17 00
1 x 6-in. x 9 to 16 ft.	20 00
1 x 8-in. x 9 to 16 ft.	21 00
1 x 10 and 12 in. x 9 to 16 ft.	22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.	19 00
1-in. No. 2, 6-ft. to 16-ft. ...	16 00
2 x 4 to 12, 10 and 16 ft.	19 00
2 x 4 to 12-in., 12 and 14 ft. ...	19 00
2 x 4 to 12-in., 18 ft.	22 00
2 x 4 to 12-in., 20 ft.	24 00
2 x 4 to 12-in., 22 ft.	25 00
2 x 4 to 12-in., 24 ft.	26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.	16 00
Clear in B. C. cedar, kiln dried	60 00

Douglas Fir:

Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.	31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.	32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.	32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.	33 00
10x20, up to 32 ft.	33 50
6x18, 8x18, up to 32 ft.	34 00
6x20, 8x20, up to 32 ft.	35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath..	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 80
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 0/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4..	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4..	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet...	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm. 1sts and 2nds, 6/4 x 8/4..	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/.	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4..	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:

1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up ..	40 00	42 00

Pine good strips:

1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00

Pine good shorts:

1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No.. 1 dressing sidings ..	30 00	33 00
Pine, No. 1 dressing strips ..	29 00	30 00
Pine, No. 1 dressing shorts ..	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips ..	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips ..	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips ..	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips ..	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft. ...	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in..	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards:		
1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12 ...	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16' ..	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1¼-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine—In the Raft		
First class Ottawa waney, 18-in. average, according to lineal..	60	65
Oak—Michigan and Ohio		
By the dram, according to average and quality	60	70
Elm		
By the dram, according to average and quality, 40 to 45 feet	70	75
By the dram, according to average and quality, 30 to 35 feet.	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide..	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E.			
	6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft...	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed) ...	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft. ...	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft. ...	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft. ...	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft. ...	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft. ...	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 114)

Barrienger Braking Device

Before you spend a dollar on your logging roads you will be well rewarded by investigating the Barrienger Braking Device. It should be used in your winter logging for letting heavy loads down steep hills and inclines, saving horses and eliminating sand hilling.

Where shall we address you to receive our catalogue?

The following is a list of Canadian Users:

J. H. MacDONALD LUMBER CO., Blind River, Ont.
GRAVES, BIGWOOD & CO., Toronto, Ont.
W. C. EDWARDS & CO., LTD., Ottawa, Ont.
GILLIES BROS., LTD., Braeside, Ont,
J. FENDERSON & SONS, Inc., Sayabec, P.Q.
EDDY & GLYNN, Sault Ste. Marie, Ont.

Multiple Saw Slashers for reducing long logs to short uniform lengths—installed by us in many of the leading Canadian Plants.

We list below some Canadian plants using our multiple saw slashers.

Canadian Plants

Laurentide Co., Grand'Mere, P. Q.; Spanish River Pulp & Paper Mills, Espanola, Ont.; Spanish River Pulp & Paper Mills, Sturgeon Falls, Ont.; Belgo Canadian Pulp & Paper Co., Shawinigan Falls, P. Q.; Riordon Pulp & Paper Co., Hawkesbury, Ont.; Anglo-Newfoundland Development Co., Grand Falls, Nfd.; Chicoutimi Pulp Company, Chicoutimi, P. Q.; Donnacona Paper Co., Donnacona, P. Q.; Bayless Pulp & Paper Co., Beaupre, P. Q.; Battle Island Paper Co., Ha Ha Bay, P. Q.; Price Bros. Co., Kenogami, P. Q.; The Bronson Co., Ottawa, Ont.; East Canada Power & Pulp Co., Murray Bay, P. Q.; Abitibi Pulp & Paper Co., Iroquois Falls, Ont.; Gulf Pulp & Paper Co., Seven Islands, P. Q.

Write for Catalogue

Ryther & Pringle Co., Carthage, N.Y.

A Range Expressly Made For Lumber Camps

The "Driver's Joy" Range

Made to burn wood and to stand hard usage. Size of fire box 24 in. long, 10 in. wide, 10 in. high. Size of top 38 in. x 28 in. Six 9 in. covers. Size of oven 24½ in. x 23½ in.

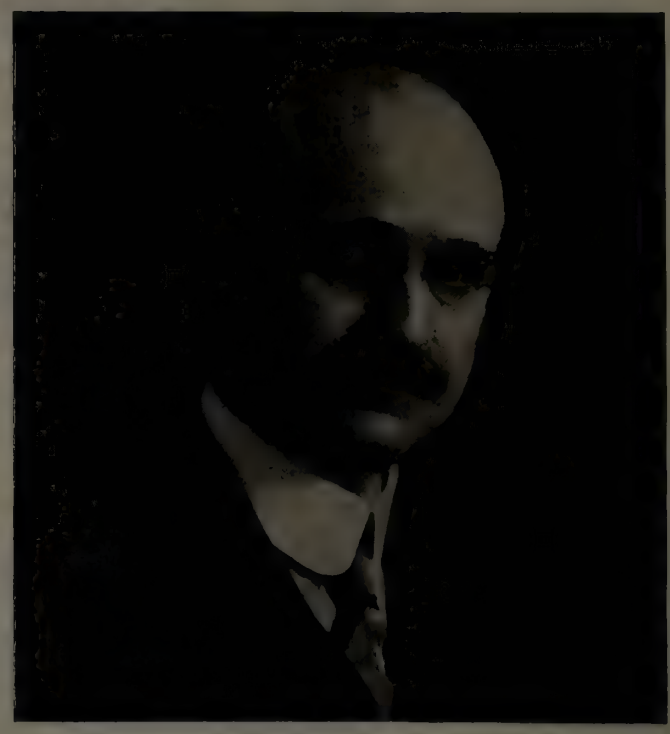
This substantial stove is only one of the many camp stoves we manufacture. Leading lumbermen are constantly finding we can satisfactorily fill their needs in this direction.

Send for catalog and prices.

Canada Stove & Furniture Co., Ltd.

Ville St. Laurent, Que.

For Over Twenty Years



E. C. Mershon has been recognized as the authority on all matters pertaining to the sawing of wood with a Band Resaw. Purchasers of Mershon Band Resaws have the benefit of his experience.

WM. B. MERSHON & CO.

SAGINAW, MICHIGAN

High Speed Planers and Slow Speed Fans

Sturtevant Fans are ideal for high speed planer service. They have the capacity to handle large volumes of material at a very low cost for power.

Served by a Sturtevant Fan

Sturtevant

(REG. CAN. PAT. OFF.)

Planing Mill Fans

are made with all kinds of wheels for handling various kinds of material. With them you get the benefit of more than 50 years experience in this work.

Write us and ask for catalogue 155-C.

B. F. Sturtevant Company of Canada, Limited

Montreal, Toronto **Galt, Ont., Canada** **Winnipeg, Vancouver**

ONTARIO

Canada's Banner Province

Ontario produces 40 p.c. of Canada's total output, 1913 1,101,066,000 feet B. M. valued at $26,774,937.

Pine production, 905,442,000 ft. B. M.—
Pulpwood, - - 246,282 cords.—
Railway Ties, - - 5,704,459.—

Ontario's woodworking industries, using 34 different kinds of wood, provide a ready market for the lumberman. Eighty-two per cent of lumber used in Ontario's industries purchased within the Province.

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No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
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No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

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White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00
All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1⅝-in. spruce laths	4 10	4 20
1½-in. spruce laths	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 60	2 80
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 20	3 30
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¼		4 80
Washington 16-in. 5 butts to 2-in. extra red clear		3 28

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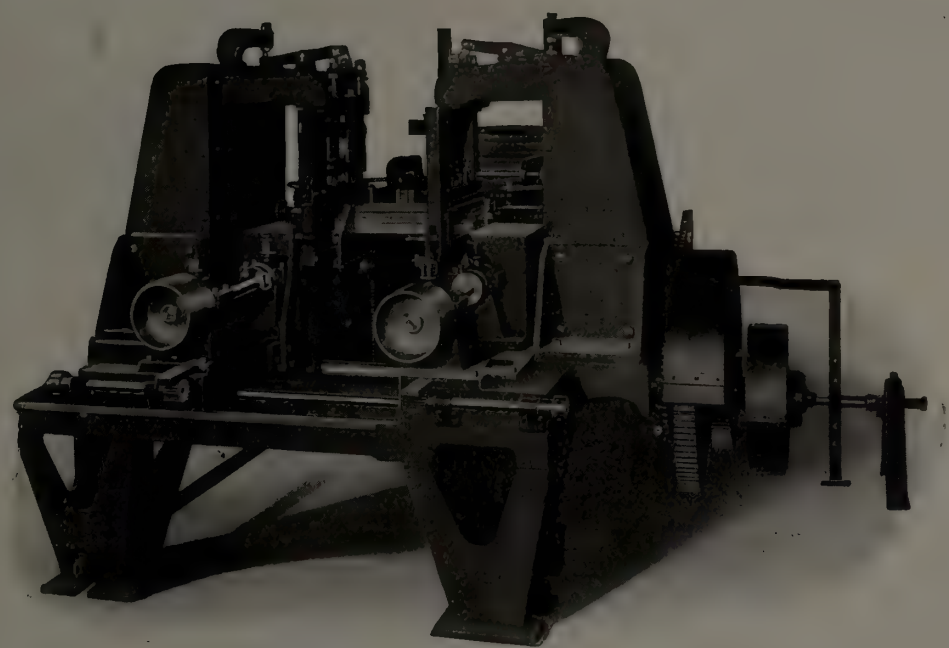

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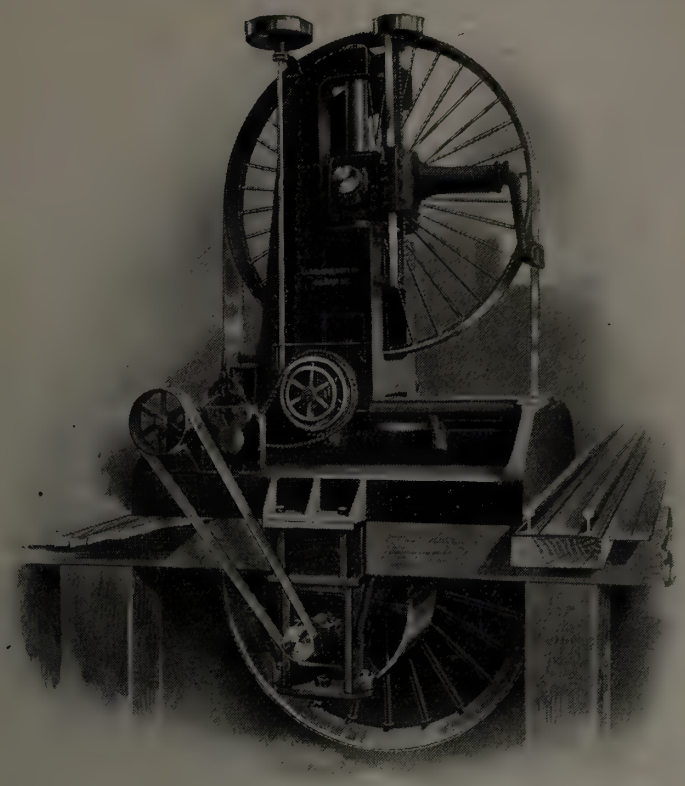

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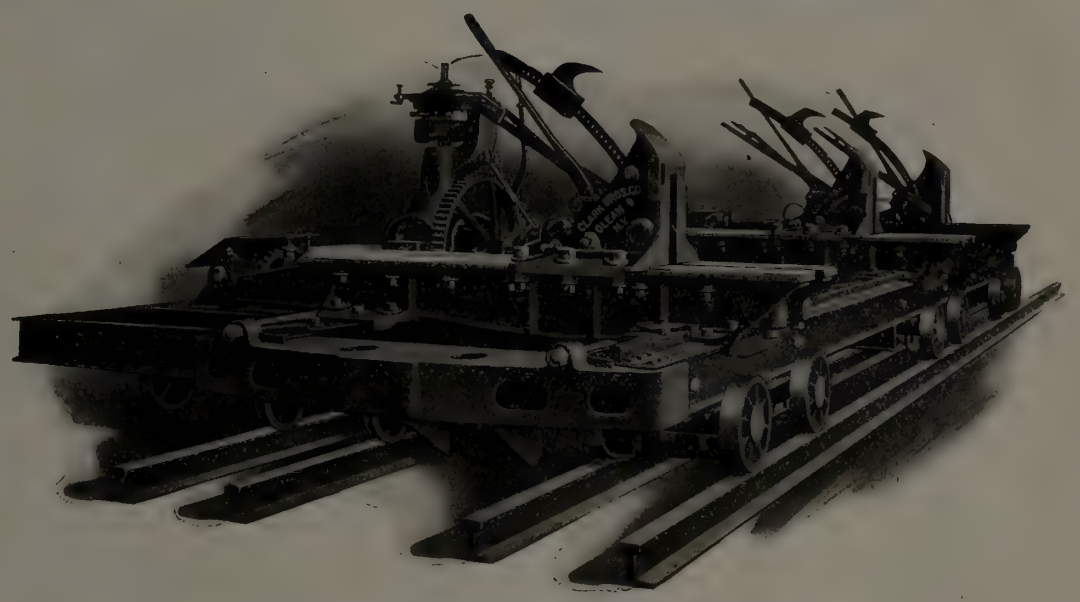

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"Wilson Bros." Hardwood Flooring

is the Flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully selected stock, and every precaution is taken throughout our entire system to make it fulfil the requirements in every particular. Write us for prices.

Wilson Bros., Limited - Collingwood, Ont.

Goodhue Belts

The Belting Problem Solved

THE most trying and severe belt service in any mill can be efficiently cared for by a Goodhue Belt. All your power all the time is efficient.

Goodhue Belts are marketed in three brands, each made from the best quality leather, but for three different services.

Goodhue Belts stretch less than any other belt by 15 to 25 per cent. This quality effects a great saving because it is unnecessary to be continually shortening the belt to keep it taut.

"Acme Waterproof" belt is made for the wet places in a mill and will give a remarkable service under the most trying conditions.

When you buy a belt—buy a Goodhue.
Price and particulars on request.

J. L. Goodhue & Co., Limited

Danville, Quebec

British Columbia Representatives—
FLECK BROS., LIMITED,
1142 Homer St.,
VANCOUVER, B.C.

Winnipeg Representatives—
BISSETT & WEBB, LIMITED,
151 Notre Dame St. E.,
WINNIPEG, MAN.

PRESSES
Boving Hydraulic & Engineering Co.
Perrin & Company, W. R.

PULLEYS & SHAFTING
Boving Hydraulic & Engineering Co.
Dodge Mfg. Company, Limited
Waterous Engine Works Company

PULP
Brompton Pulp & Paper Company
Riordon Pulp & Paper Co., Ltd.

PULP MILL MACHINERY
Boving Hydraulic & Engineering Co.

PUMPS
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

ROOFING
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company
Tessier, Alphonse

SAWS
Atkins & Company, E. C.
Disston & Sons, Henry
Hoe & Company, R.
Radcliff Saw Mfg. Company
Shurly-Dietrich Company
Simonds Canada Saw Company

SAW SHARPENERS
Rogers & Company, Samuel C.

SAW MILL MACHINERY
Berlin Machine Works
Clark Bros.
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Mereen Johnson Machine Company
Oxford Foundry & Machine Co., Ltd.
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company

SHINGLES
Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SNOW PLOWS
Bateman-Wilkinson Company
Pink Company, Thos.

SOUTHERN PINE
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Cameron & Company
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Garrett Lumber Company, T. H.
Gates Lumber Company
Hobart & Company
Mason, Gordon & Company
Southern Lumber Company
Stout Lumber Company
Valley Lumber Company
Wilson Lumber Company
Wisconsin & Arkansas Lumber Co.
Wuichet, Louis

SPARK ARRESTERS
Canada Wire & Iron Goods Company

SPRINKLER SYSTEMS
Keiths Limited

SPRUCE
Auger & Son
Bartram Bros.
Blair & Rolland
Bourgouin, H.
Brown Corporation
Cameron & Company
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company
Chas. T. White & Sons, Limited

STEEL BARRELS
Smart-Turner Machine Co.

STEEL CHAIN
Canadian Link-Belt Company
McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

STEEL DRUMS
Smart-Turner Machine Co.

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Canada Stove & Furniture Company

STOKERS
Jones Underfeed Stoker Company

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

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Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

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Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TIME RECORDERS
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TRANSMISSION MACHINERY
Canadian Link-Belt Company

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Hoffman Brothers Company
Webster & Bro., James

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Coe Manufacturing Company
Perrin, William R.
Philadelphia Textile Machinery Co.

VETERINARY REMEDIES
Fleming Bros.

WATER WHEELS
Boving Hydraulic & Engineering Co.

WOODWORKING MACHINERY
American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Canada Machinery Corp., Ltd.
Cowan & Company
Elliot Woodworker Company, Ltd.
Long Manufacturing Company, E.
Preston Woodworking Machinery Company, Limited
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

Tillson's Rolled Oats
Rainbow Flour—Top Patent Manitoba.
Goldie's Star—Famous Blended Flour.
Lily Flour—For Pies and Pastry.
Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

GUARANTEED ABSOLUTELY PURE

Canadian Cereal and Flour Mills Co., Ltd.
TORONTO - - - - - CANADA

Veneer Machinery

The Best in 1850
The Best in 1914

Slicer

Lathe

In this age of specialization only those firms of keen observation and untiring effort can hope to win success in any one line. Our entire efforts for 64 years have been spent upon making Coe Veneer Machinery the best possible equipment for cutting, slicing, clipping, wringing, sawing, drying, stamping or producing veneer from any kind of lumber.

With the rapidly increasing demand for lumber and the rapidly dwindling supply, the use of veneer products must greatly increase.

If you are in the market for veneer equipment we will be pleased to hear from you. The many and varied Coe plants now in successful operation are proof that we can design and equip a plant to suit your conditions. **Write us for Catalogue.**

Clipper

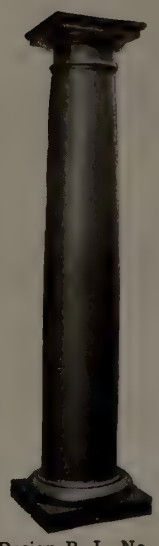
Dryer

The Coe Manufacturing Company
PAINESVILLE, OHIO. U.S.A.

Established 1850

The oldest and largest manufacturers of complete veneer mill equipment in the world.

B.L. No. 312, ¼-Cut Oak



Design B. L. No. 1

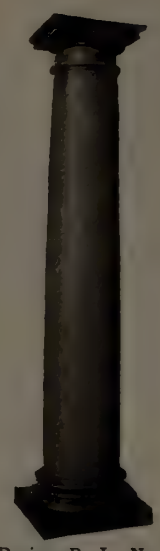
BATTS LIMITED

Manufacturers

377-9 Pacific Ave.

TORONTO, ONT.

Our plant covers 110,000 square feet.



Design B. L. No. 2

B.L. No. 316, Chestnut

B.L. No. 350, 1⅜ in. thick. Clear Edge Grain Fir Stiles and Rails, Georgia Pine Raised Panels.

BUY GOODS "MADE IN CANADA"

(We Manufacture All Our Own Goods)

Our facilities for the execution of orders for doors and columns to special design are such that we can satisfactorily meet any requirement.

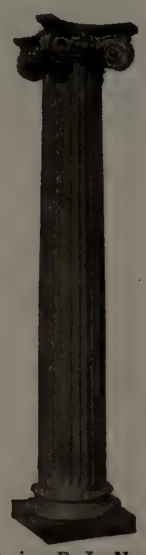
MANUFACTURERS OF

Veneered Doors,
Pine Doors and
Fir Doors,

Staved Columns,
Stair Material,
Sash and Frames,
Greenhouse Material,
Newels, Balusters,
Panelling and
Interior Fittings

B.L. No. 317, Fir

B.L. No. 334 ¼-Cut Oak



Design B. L. No. 5

Design B. L. No. 6

B.L. No. 335 ¼-Cut Oak

Lumbermen's Tents and Clothing

Pure wool, Waterproof Mackinaw Coats, Pants and Shirts,
the kind you have been looking for.

Repellant Brand Army Duck Tents

The best duck that money can buy.
We can equip your van complete.

Pure wool Blankets, Sweaters, Underwear. Hand Knit Mitts and Socks. Palmers Shoe Packs, Buck and horse hide Moccasins, etc.

Grant-Holden-Graham, Limited

Factory and Warehouse

147 to 151 Albert Street, Ottawa, Can.

RUBBER GOODS
FOR LUMBERMEN

Belting Our long experience in the making of Rubber Belts enables us to specialize on this line. "P.M.S.," "Special Drive" and "Lion" are our leading brands for power transmission.

Packings "Redstone" High Pressure Sheet Packing has proved by test that it will outlast any other similar packing on the market. We make Spiral and Ring Packings, etc., that are equally reliable.

Hose for Steam, Water, etc., in various grades, made especially to give satisfactory and economical service under different conditions.

Fire Hose One or more of our twenty brands of Fire Hose will be found, not only in the best equipped Factories, Mills, etc., but in almost every Fire Department in the Dominion.

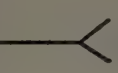
Gutta Percha & Rubber, Limited

TORONTO MONTREAL WINNIPEG REGINA SASKATOON CALGARY EDMONTON VANCOUVER

LINK-BELT
SAW MILL CHAINS

Superior in Design, Workmanship, Quality
High Carbon Steel Pins.
Patterns Full Weight—Full Strength

We are prepared to make prompt shipments of standard sizes from our own factory and warehouse in Toronto. Let us figure on your requirements.

This Trademark  *on every link.*

Write for Catalog No. 110D.

Canadian Link-Belt Company, Ltd.
1189 King Street West, Toronto

Seattle, Link-Belt & Dodge Products Company, 580 First Avenue South.
Portland, Ore., Link-Belt & Dodge Products Co., 14th and Lovejoy Sts.
A. R. Williams Machinery Company, Limited, Vancouver, B. C.
Waterous Engine Works Company, Limited, Brantford, Ont.

Are your horses of use to you?

This seems an absurd question—and the answer is always **"Of course they are"**—In which case provide your stables with:

Johnson's Reliable Veterinary Remedies

Johnson's Horse Liniment, No. 1 (Alcoholic)

1 gal. jugs (Imperial)	$4.50 gal.
1 lb. bottles	8.00 doz.
2 lb. bottles	15.00 doz.

Johnson's Horse Liniment, No. 2 (an oil liniment)

1 gal. jugs (Imperial)	3.00 gal.
1 lb. bottles	6.00 doz.
2 lb. bottles	11.00 doz.

Johnson's Horse Colic Remedy
A sure and speedy cure for all kinds of Colic

1 gal. jugs (Imperial) 40 doses	5.00 gal.
1 lb. bottles 4 doses	8.00 doz.
2 lb. bottles 8 doses	15.00 doz,

Johnson's Veterinary Healing Ointment (Gall Cure)

2 lb. tins	2.00 per tin
4 oz. tins	3.50 doz.

Johnson's Condition Powders (Concentrated)

1 lb. Packages	3.60 per doz.

Johnson's Camp and Household Remedies, such as Cough Syrup, Healing Ointment, Headache Powders, Big 4 Liniment, Stomach Bitters, Cathartic Pills, etc., etc., have stood the test of twenty-five years and are in use all over Canada, from the Atlantic to the Pacific. Prices are lower than those of all other manufacturers. Letter orders receive prompt attention.

A. H. Johnson, Wholesale Druggist, **Collingwood, Ont.**

Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

"Maple Leaf" Brand
Stitched Cotton Duck Belting

A trial Belt will convince you. Write for prices and samples.

Excels all others in economy, strength, efficiency and true running, whether for transmission of power or conveying. A test recently made at McGill University, Montreal, of a 6-ply **"Maple Leaf"** belt, a light double leather, and a 6-ply rubber belt, showed that our **"Maple Leaf"** Belt stood a breaking strain 50 per cent. greater than the leather, and 25 per cent. greater than the rubber belt.

"Maple Leaf" Main Drive Belts
Are the Best on the Market.

"Maple Leaf" Belt Dressing is the best for all kinds of belts.

Dominion Belting Co., Limited
HAMILTON - ONTARIO
Branch: Montreal—Office 51 Duluth Building

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.

E. J. Macintyre, 1413 Great Northern Bldg., CHICAGO.

A Test In Your Workshop

will convince you of this fact:

That it is cheaper to use two files where you now use only one.

Take a certain piece of work and give one man a new file, and another a half worn file on a similar piece of work.

The man with the new file is doing what you are paying him for. The other man is filing away your time.

The man with the new file takes a pride in his work.

The man with the old file starts with a grouch, and the work suffers.

When the inefficient point in the files is reached it is good policy for you to have your men discard them.

And they should be replaced with the five famous brands:

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE
(Made In Canada)

Made in Canada by a plant controlling 90% of the file business.

Backed by 50 years' experience in the making of efficient files.

Send for your FREE copy of "File Filosophy" NOW.

Nicholson File Co.
Port Hope, Ontario

DEALERS EVERYWHERE.

NO. 40 HEAVY DUTY STEEL SAW CARRIAGE

Long's "Quality" Carriages were the first saw mill machines built by the Company. They were the machines that earned the reputation for dependability in service, that has placed "Long" Machinery in its present enviable position, at the head of its class. There is a "Long" carriage, in a weight, and at a price, to suit every purchaser. Catalogue on application.

The carriage illustrated is our heavy duty 3 block No. 40, the knees of which recede 40" from saw line. The carriage can be furnished in any number of head blocks or axles.

THE E. LONG MANUFACTURING Co. SAW MILL MACHINERY ORILLIA, CANADA

This mark on your saw mill machinery is an indication that your lumber manufacturing equipment is the best and most economical money can buy.

AGENCIES:—

MONTREAL — Williams and Wilson, Ltd.

WINNIPEG—Stuart Machinery Co., Ltd.

EDMONTON and CALGRY—Gorman, Clancey & Grindley, Ltd.

VANCOUVER—Robert Hamilton & Co.

The E. Long Mfg. Co. Ltd., Orillia

Light Mill Outfits

To meet the growing demand for light mill equipment we have designed and built a complete line of machines especially suitable for small mill use.

They include everything from haul-up to sorting table and the power plant to drive them with.

We have put into them the best materi als money can buy and the mechanical skill gained by 70 years experience build ing heavy duty machines for big mills.

If you want a small mill outfit that is b uilt better, will turn out better lumber, will work faster and last longer than an y other, we can supply it.

Our catalogues cover in detail every machine we build. Sent on request. A post card will do.

WATEROUS CIRCULAR SAW FRAMES

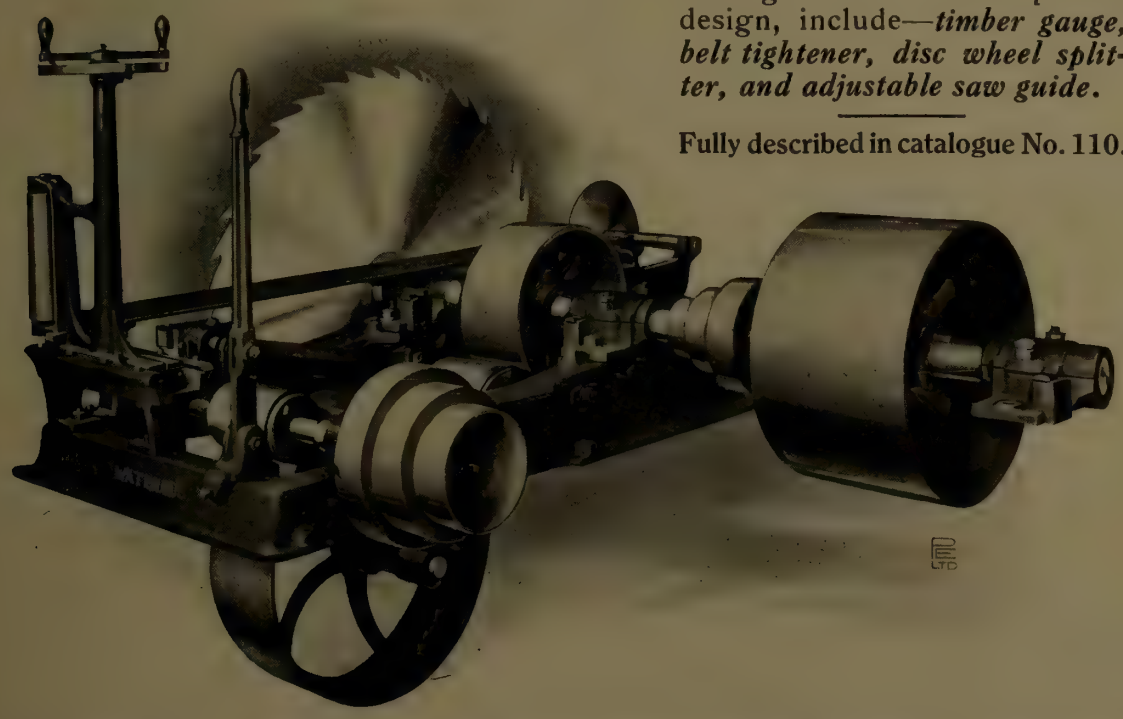
Our saw frames specially built for light mill work include sizes to cut from 2000 to 25000 ft. per day.

The generous proportion of all parts that have work to do and the simplicity and convenience of handling are noticeable.

Mandrel is of extra large diameter, supported in ***three*** bearings. Friction feed works are belt driven, powerful in action, arranged to give positive control to carriage movement and designed to cut down time of gigging to materially increase capacity.

Fittings of the most improved design, include—***timber gauge, belt tightener, disc wheel splitter, and adjustable saw guide.***

Fully described in catalogue No. 110.



We Build

- Haul-ups
- Chains
- Steam and Friction Log Decks
- Carriages—Opening 24″ to 50″
- Steam and Friction Feeds
- Circular Saw Frames
- 6 ft. Pony Band Mills
- 7 ft. Band Mills
- Circular Gangs
- Trimmers
- Slashers
- Sorting Tables
- Live Rolls
- Transmissions
- Transfers
- Filing Room Tools
- Steam Plant Equipment

The Waterous Engine Works Co., Ltd.

H. B. Gilmour, Vancouver, B.C. **Brantford, Canada** Branch—Winnipeg, Man

$5,000,000.00
worth of mixed metal sold annually.

"FROST KING" METAL

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. Price 30c per lb., Fort William and East; West of Fort William 35c per lb., delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, 40c per lb.; West of Fort William, 45c, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

The Rossendale-Reddaway Belting and Hose Company

NEWARK, N.J. U.S.A.

Manufacturers

"CAMEL HAIR" BELTING

"CAMEL HAIR" "CAMEL" BRAND TRADE MARK REG. BELTING

Beware of Imitations

BIRD'S BULL'S-EYE BELTING

BIRD'S BULL'S EYE B BB BELTING

HAIR BELTING—"Arabian" Brand
SOLID WOVEN COTTON BELTING—"Blackbird" Brand
STITCHED CANVAS BELTING All Weights
AUTOMOBILE BRAKE LININGS

F. Reddaway & Company

653 St. Paul St. West, MONTREAL, QUE.

Distributors for Canada: A. R. Williams Machinery Co. Ltd., Toronto, Ont.
A. R. Williams Machinery Co. of Winnipeg, Ltd.

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co. Limited

General Mill Supplies MONTREAL

Clean Comfortable Bunks

If a Lumber Jack is to work at his best he must be content with his job and satisfied with the conditions under which he has to live.

THE ALASKA DOUBLE DECK BUNKS

will largely contribute to the comfort and contentment of your men.

Write us for prices.

The Alaska Feather & Down Co., Limited, Montreal

Canada Lumberman & Wood Worker

WATER WHEELS
GOVERNORS, PUMPS

Highest quality

Boving Hydraulic & Engineering Co.
LINDSAY, ONT. Limited

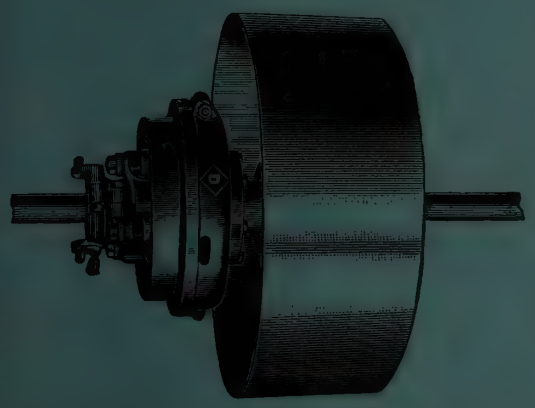
Electric-Welded Boom Chain

25% {More Weld = 25% {More Strength = 25% {More Wear

Sheared Toggle and Ring * T Bar Hook and Link * Two Sheared Toggles * Forged Toggle and Ring

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.



DODGE FRICTION CLUTCH PULLEYS

For Saw Mills and Planing Mills

A simple, positive, durable clutch! Every Friction Clutch Pulley we sell is guaranteed suitable and satisfactory for the work or money refunded. All sizes split or solid for quick shipment.

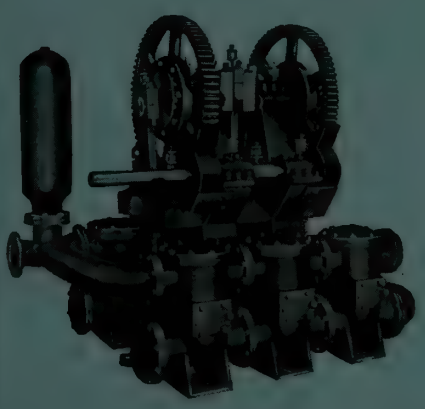
Dodge Manufacturing Company, Limited
TORONTO -:- MONTREAL

GENUINE "TURBROS"
Balata Belting

Waterproof and Stretchless.
The best belt for sawmills.

Manufactured and guaranteed by

Turner Bros. Canada Limited
Montreal



PUMPS

We are putting into our pumps the best of workmanship and material, and can give you the best possible return on your investment when you buy a pump of our make.

Send us your inquiry.

The Smart-Turner Machine Co., Limited.
Hamilton Canada

Keeping "Tab" on Lumber

The illustration was made from an actual photo of a Morrison Measuring Register in operation on a planer. It gives an accurate account of the amount of lumber passing through the machine. It will automatically and continuously measure your stock, giving the result in lineal or board measure as desired. It can be used for either tallying small orders or for totalling the day's run.

WRITE FOR PARTICULARS

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertisers, Page 50 Classified Directory to Advertisements, Page 56

"Leather like gold has no substitute."

A Reason — Simple but Sound

From time to time you are puzzled to know why you do not derive a full return from your efforts to secure ample power for your machinery. Where is the vent-hole through which your power escapes?

Look to your belting. You are creating your power all right but you are allowing it to leak in transmission. Can you expect an ordinary, common leather belt to be efficient, pliable, tenacious, friction-reducing when it has never been prepared to stand the damp atmostphere of green lumber or the effects of steam and oil?

"AMPHIBIA" Belting is no common, ordinary leather. It is prepared from selected hides, oak-tanned and waterproofed by a secret process. Its flexibility will surprise you. It is absolutely impervious to oil.

Try a sample run.

"AMPHIBIA"

The Flexible Waterproof Belt

Really Grips The Pulley

Sadler & Haworth

TORONTO	WINNIPEG	MONTREAL	VANCOUVER	ST. JOHN
38 Wellington St. E.	Galt Building	511 William St.	107-111 Water St.	149 Prince William St.

To insure satisfaction state where belt is to run.

Geo. Gordon & Co., Limited

Cache Bay, Ontario

Red and White PINE

Dressing done on short notice. ***Send us your inquiries.***

FOR SALE: Machinery and Timber

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the town of Parry Sound, Ont.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

All of the above open for inspection at Parry Sound.

The Parry Sound Lumber Co., Limited,

26 Ernest Ave.
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Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

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Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock— heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

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—Special—
1 x 4 & 5 White Pine common and dressing 1913 cut

Dry Hemlock and Spruce all sizes

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BISCOTASING, ONT.

Dry Cull Lumber
at very attractive prices

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3 cars 3 in. No. 1 Com. & B. Maple.
1 car 1 x 9 and wider No. 2 C. & B. Birch.
2 cars 1 x 9 and wider No. 1 Com. & B. Maple.
1 car 6/4 x 9 and wider No. 1 Com. & B. Maple.
2 cars 4 x 5 Merchantable Spruce.
2 cars 1 x 10 Merchantable Spruce.

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Lumber, Lath and Shingles
109 Stair Building, Toronto Phone M. 6368

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RED PINE **SPRUCE**

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The following stock is offered for immediate shipment:

100,000 ft.	1 x 12	-	6/16	No. 1	Mill Cull	White Pine
82,000 "	1 x 10	-	6/16	"	"	"
25,000 "	1 x 6	-	6/16	"	"	"
80,000 "	1 x 5 & up		6/16	"	"	"

We Can Give You Good Prices.

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"What We Have We'll Hold"——

We have a reputation for square honest dealing and for delivering the best quality of lumber in

HOCKEN'S HEMLOCK

We want your trade and we want to hold it.

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Our Mills Produce and We Market as Much
GENUINE LOUISIANA RED CYPRESS
As All Other Concerns Combined

250,000,000 feet constantly in stock insures filling any reasonable order promptly.
Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

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LOUISIANA RED CYPRESS COMPANY

Hibernia Building New Orleans, La.

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

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Fassett Lumber Company, Limited

Fassett, Que.

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SPELL IT BACKWARDS

The Lumberman's Milk

In Powder Form

Klim is pure—cheaper than fresh liquid milk. One-third the cost of condensed milk. No freights on useless water—keeps in any temperature—no waste.
Packed for camp use especially in 10 pound tins $2.00 each, the pound makes one gallon. Case lots, special price.

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Plants:—Belmont, Ont., Brownsville, Ont. Head Office:—Mail Building

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

Bartram Brothers

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Some of our stock on hand unsold. November 1, 1915

Devon, Ont. C. P. Ry.

NORWAY C. & C. F.

	Feet
1 x 4 and up x 10-16	7,852

NORWAY MILL RUN

1 x 4/5 x 10-16	1,465,603
1 x 6 x 10-16	418,768
1 x 7 x 10-16	130,976
1 x 8 x 10-16	46,416
1 x 9/11 x 10-16	27,995
1¼ x 4/6 x 10-16	101,000
1¼ x 7 and up x 10-16	214,190
2 x 4 x 10-16	118,052
2 x 6 x 10-16	141,375
2 x 8 x 10-16	240,865
2 x 10 x 10-16	58,119
3 x 4 and up x 10-16	357,291

NORWAY CULLS

1 x 4 and up x 6-16 No. 1 and 2	803,190
1 x 4 and up x 6-16 No. 1	350,000
1 x 4 and up x 6-16 No. 2	314,798
3 x 4 and up x 6-16 No. 1	210,764

WHITE PINE GOOD

1 x 4 and up x 6-9	1,600
1 x 4 and up x 10-16	10,067

WHITE PINE MILL RUN

1 x 4/5 x 10-16	123,460
1 x 6 x 10-16	16,100
1 x 7 x 10-16	60,585
1 x 8 x 10-16	15,969
1 x 9/11 x 10-16	20,100
1 x 10 x 10-16	2,550
1 x 12 x 10-16	9,912

Devon, Ont. (Continued)

WHITE PINE MILL RUN

	Feet
1¼ x 4/6 x 10-16	40,000
1¼ x 7 and up x 10-16	68,000
1¼ x 4 and up x 10-14	100,000
1½ x 4 and up x 10-14	200,000
2 x 4 and up x 10-16	4,311
3 x 4 and up x 10-16	109,696

WHITE PINE CULLS

1 x 4 and up 6-16 No. 2	120,160
2 x 4 and up x 6-16 No. 1	5,537
3 x 4 and up x 6-16 No. 1	54,221
3 x 4 and up x 6-16 No. 2	8,516

MILL RUN LATH

1½—32-in. White Pine	188,800
1½—32-in. Norway	655,650

Barachois, Que. I. C. R. or Boat

SPRUCE MILL RUN

1 x 4 x 10-16	199,197
1 x 5 x 10-16	354,226
1 x 6 x 10-16	387,930

SPRUCE CULLS

3 x 4 and up x 6-16	260,000

Montreal, Que. Basin No. 3

SPRUCE CULLS

1 x 4 and up x 6-16	137,079
Largely 6 and 8 in.	

We have large stocks of 3" spruce deals, scantlings, planks and boards for export.

"Specialists in Quick Shipments"

EXPORTERS TO U. K. AND EUROPE

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WHOLESALERS

Shell Box Stock

4″ x 8/12″ Norway (Stock Widths)
4″ x 4″ to 5″ x 5″ White Pine Quartered Dry

Send us your enquiries

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Also

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Lumber - Lath - Shingles

Cedar Poles and Posts

Railway Ties - - Piles

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Fredericton, N. B.

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Red Pine
Spruce
Lumber and Lath

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Manufacturers of

SPRUCE

Lumber Lath Pulpwood

Head Office and Mills at:

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On I. C. Ry. 75 Miles East of Quebec City

Also Mills at:

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On Nat. Transcontinental Ry.

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Successors to

The North Shore Shingle Association

This Association is comprised of the following Cedar Mills :

Price Brothers & Co., Ltd.	Quebec
The Shives Lumber Co., Ltd.	Campbellton, N. B.
The Richards Mfg. Co., Ltd.	"
B. A. Mowat	"
Edwards & McLean	Bonaventure, Que.
The Forest Reserve Pulp & Paper Co., Ltd.	Gaspe, Que.
The Restigouche Lumber Co., Ltd.	Dalhousie Jct., N. B.
The Dalhousie Lumber Co.	Dalhousie, N. B.
The Continental Lumber Co.	Charlo, N. B.
The Bathurst Lumber Co.	Bathurst, N. B.
The Miramichi Lumber Co.	Chatham, N. B.
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Standard Grading Rules at all the mills assure uniform grading. We can now furnish dry stock in all grades for prompt shipment. Delivered prices at all points West of Campbellton, N. B.

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F. G. WHEATON, Amherst, N.S.

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Special: To reduce stocks we are quoting special prices on

Clear Walls Specials Extra No. 1s.

These grades are bone dry and can be shipped at once.

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Dimension Stock, Mattress Frames, Hard and Soft wood slabs cut to lengths required. Hemlock, Cedar, Posts.
Orders receive prompt attention.
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Good Grades — Right Prices — Prompt Shipments

Canadian Hardwood. National Grading Rules

Birch
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Maple
Elm
Beech

All Thicknesses

Also full line in

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All grades and sizes.

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Sawed Hemlock
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Pine and Hardwood
Lumber
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LUMBER AND TIMBER
White Pine, Norway, Yellow Pine, Hemlock Oak Mouldings, Doors, Sashes and Blinds, Cedar Poles and Ties.
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Spruce, Hemlock, Pine and Hardwoods
Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.
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PRESSES
Hydraulic and Screw
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VENEER
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Special machinery made to order
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Some
Hardwood Specials
All in Shipping Condition

35,000 ft. 1" No. 1 Com. and Btr. Black Ash
10,000 ft. 2" No. 1 Com. and Btr. Black Ash
AT RENFREW

65,000 ft. 1 x 8¼" and up No. 1 and 2 Com. Birch or will ship 9" and up.
AT DEER LAKE

Following offered in block:
174,000 ft. 4/4" No. 1 Com. and Btr. Birch
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28,000 ft. 6/4" No. 1 Com. and Btr. Birch
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19,000 ft. 10/4" No. 1 Com. and Btr. Birch
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AT DEER LAKE

Wide average and well manufactured.

Inquiries solicited and will have prompt response.

Graves, Bigwood & Co.

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Pine and Hemlock Lumber

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Mills: Byng Inlet, Ont.

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Our Specialty
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We are Buyers of
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Veneers (3 or more ply) Handles (all descriptions)
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My methods of cruising, based on 24 years' experience, will prove as valuable to you as they have to many large Banking and Bond Houses, Railroads, Corporations, and private Investors in the United States and Canada,
Whether you want to buy, bond or sell I can be of service to you.

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Formerly: Forest Expert U. S. Forest Service, State Forester of New Jersey, Timber Expert Penna. Forest Commission, etc.

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Spruce
for
Ammunition Boxes

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OF PENETANGUISHENE

Manufacturers of and Dealers in

Lumber, Lath, Shingles, Etc.

HEMLOCK BILLSTUFF a Specialty of which we have the Best Assortment on Georgian Bay.

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All stock sized or matched if required.

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Far sighted owners of timber lands should take advantage of the times incident to the European wars, and prepare themselves for the day when the demand for timber is suddenly thrust upon them. This is certain to come at no distant day. Therefore cultivate a closer acquaintance with your holdings, and the best method of marketing them. Let us prepare the way for you. Remember, we not only report on the property, but assist in marketing the bond issue when necessary. Send for our booklet.

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California White Pine
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Valuable Timber Limits, Mill Site, Plant and Equipment

There will be offered for sale, by Public Auction, in the Rotunda of the Royal Alexandra Hotel, in the City of Winnipeg, in the Province of Manitoba, on

Saturday, the 15th Day of January, 1916,

at the hour of eleven o'clock in the forenoon, the following property, namely:—

TIMBER BERTH LICENSE covering TIMBER BERTH No. 1000, containing an area of 4.88 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 1001, containing an area of 6.05 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 1002, containing an area of 3.11 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 571, containing an area of 4.75 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 551D, containing an area of 18 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 981, containing an area of 45.77 square miles more or less;

TIMBER BERTH LICENSE covering TIMBER BERTH No. 960, containing an area of 49.61 square miles more or less;

SCHOOL LAND TIMBER BERTH PERMIT covering TIMBER BERTH No. 146, being part of Section 11-44-8 West of Second Meridian in Saskatchewan.

EAST HALF of SECTION 7-45-7 West 2nd in Saskatchewan, excepting a right of way of 6.02 acres more or less;

Together with Saw and Lath Mill Buildings, Dwelling Houses, Office Building, Cook-house, Warehouse, Stable, Round House and other buildings situate thereon; also extensive Logging, Lumbering and other machinery, equipment and plant in connection therewith; also certain railroad plant, equipment and rolling stock suitable for use in connection with the above lumbering plant and timber berths.

The above properties are situate at or near Prairie River in the Province of Saskatchewan, with the exception of Berths Nos. 571 and 551D, which are situate near Dauphin in Manitoba.

The above properties will be offered subject to reserve bid, and will be offered in bulk or in parcels as the Vendors may decide at the time of sale.

TERMS OF SALE.—Ten per cent. of the purchase price to be paid in cash at the time of sale, and the balance in accordance with the terms and conditions to be made known at the time of sale.

For further particulars, apply to:—

JAMES SHAW or THOMAS SHAW,
Dauphin, Manitoba
or to J. H. NEEVE, 363 Main Street,
Winnipeg, Manitoba

Dated this Twenty-first day of October, 1915.

"Back in 1892"

Are you one of those dealers who look wistfully backward to the days when

One Kind of Wood
supplied
All Items of Lumber?

Do you still believe you must carry a dozen woods to sell a complete house bill?

If so you are mistaken.

Arkansas Soft Pine

supplies an item for nearly every use to which lumber may be put. It is pre-eminently

***THE* Wood for Interior Trim**

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60 to 65 per cent. of the log goes into common stock of great and varied usefulness.

Our Booklet "C" will give facts—It's Free.

Arkansas Soft Pine Bureau
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Quotations Direct—Straight or Mixed cars from any of the following:

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Fordyce Lumber Company,	Fordyce, Ark.
Gates Lumber Company,	Wilmar, Ark.
Southern Lumber Company,	Warren, Ark.
Stout Lumber Company,	Thornton, Ark.
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Limited

PENETANGUISHENE, ONTARIO

"GET A BOARD"

is the Slogan now,
but we say
be wise
and get many boards,
but be sure
to get Beck's boards
in

Norway and White Pine

and be prepared for your customers.

Try a Sample Car

of our 1 x 4" to 9" Common,

which has about 15% 4", 15% 5", 35% 6", 8% 7", 25% 8", 2% 9 and 11".

Have this milled to suit your trade and we will give you satisfaction.

Let Us Quote You On

Your Requirements

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Rough and Dressed Lumber and Lath

We specialize on cutting to order all sizes of

Dimension Timber

Also in Dressing in car or mixed lots 1", 2" and 3" to customers' specifications.

Complete stocks always ready for prompt shipment.

Send your inquiries.

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A Range Expressly Made For Lumber Camps

The "Driver's Joy" Range

Made to burn wood and to stand hard usage. Size of fire box 24 in. long, 10 in. wide, 10 in. high. Size of top 38 in. x 28 in. Six 9 in. covers. Size of oven 24½ in. x 23½ in.

This substantial stove is only one of the many camp stoves we manufacture. Leading lumbermen are constantly finding we can satisfactorily fill their needs in this direction.

Send for catalog and prices.

Canada Stove & Furniture Co., Ltd.

Ville St. Laurent, Que.

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in sealed packets. The flavour is preserved and for convenience they are far superior to open chests or large tins.

"SALADA"

TEA

is packed in sealed aluminium packets and is always fresh and fragrant. Splendid flavour and goes furthest.

Send us your enquiries.

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HIGH GRADE RED CEDAR SHINGLES

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What it Contains:

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Price 50 cents

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Heavy Fir Dimension

Is Our Particular Specialty

The Heavier it is the Better we like it

We Dress from 1 to 4 Sides up to 16-in. x 20-in., 60-ft.

Our grade is posstively right, and prices will please

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Mills at Craigs on the B.C.E.R.
Shipment by C.P.R.R., G.N.R.R. or B.C.E.R.R.

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MANUFACTURERS OF

British Columbia Red Cedar Exclusively

4, 5 and 6 inch "CLEAR A" Cedar Bevel Siding.
8, 10 and 12 inch CLEAR CEDAR FINISH.
EXTRA XXX RED CEDAR SHINGLES.

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Mills: Three Rivers and Cape Madelaine

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Mill: St. Gabriel de Brandon
Head Office: 524 Board of Trade, Montreal, P.Q.

Manufacturers of
Spruce and Pine Lumber and Ground Wood Pulp

We handle
Everything in Lumber

Write or wire for prices and stock lists.

The McLennan Lumber Co.
Limited
21 Dorchester St. W. Montreal, Que.

ONTARIO
Canada's Banner Province

Ontario's timber production last year valued at $26,774,937 or 40% of Canada's total output.

Pine production, 905,442,000 ft. B.M.
Pulpwood, 246,282 cords.
Railway Ties, 5,704,459.

Ontario's woodworking industries, using 34 different kinds of wood, provide a ready market for the lumberman. Eighty-two per cent. of lumber used in Ontario's industries purchased within the Province.

Ontario's vast resources offer unsurpassed opportunities to the lumberman.
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Head Office: ST. JOHN, N.B.

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Bleached Sulphite Pulp

Spruce, Pine and Hemlock Lumber, Laths, Hardwoods

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Banksian Pine
Birch

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Plant of The Stearns Salt and Lumber Co.

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Michigan Hardwoods
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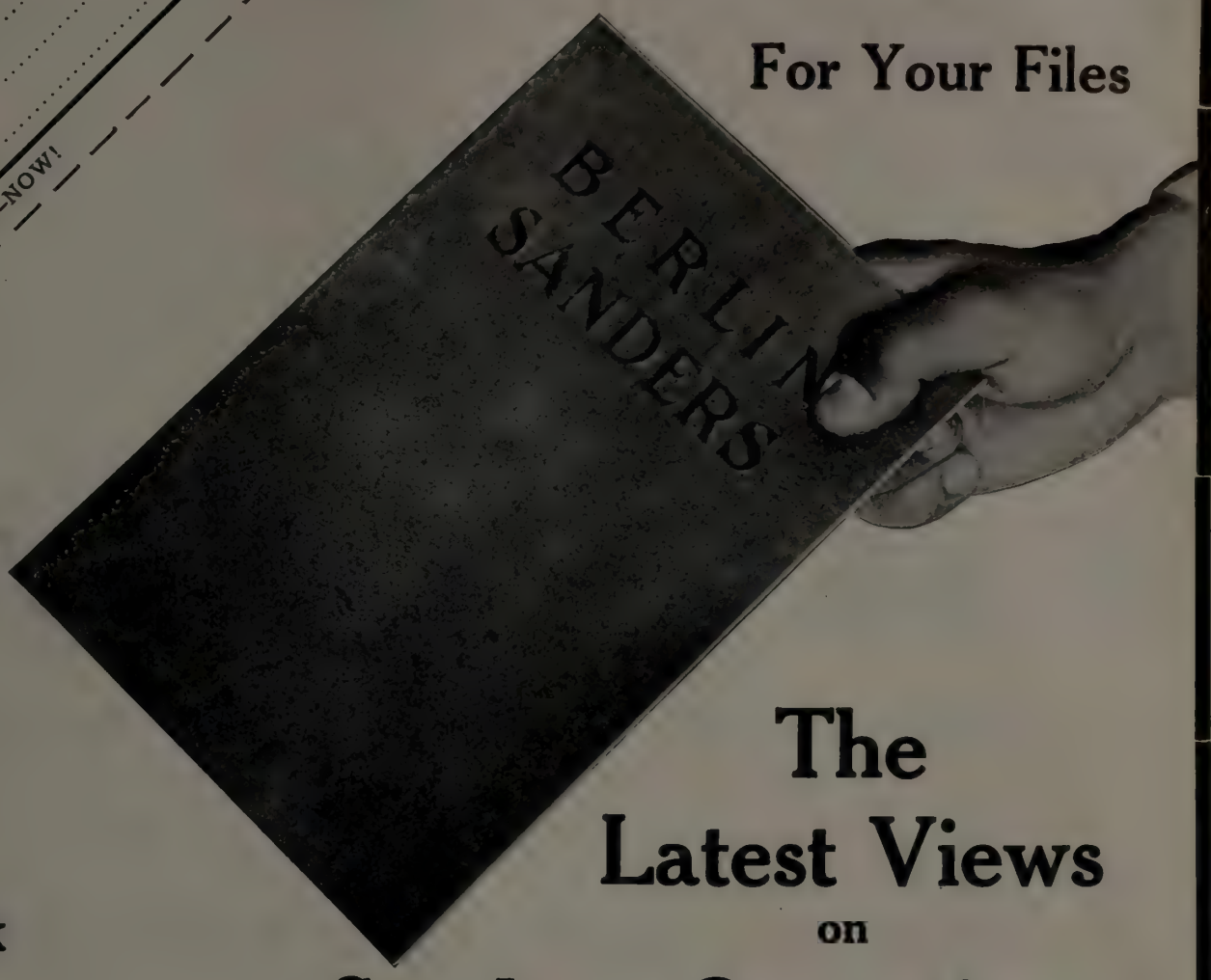

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Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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Our Position Regarding the Shell Committee

Under the title "Shell Box Contracts—Too Much Secrecy," we published an article in the November 1st issue of the Canada Lumberman, in which we said, as mildly as we knew how, that contracts for shell boxes have not been given out in a manner that meets with public approval; in short, that the shell box contract policy of the committee has not been in the best interests of the Empire. Some of the Government newspapers, and some of the opposition newspapers, have taken up what we had to say and have placed their own interpretations upon it.

We want to make ourselves clear in this connection at once. We have no axe to grind in these matters. We want our readers to understand that they can get from us an opinion unbiassed by politics, to realize that our aim is to give the absolute truth. As publishers of a trade journal we have no desire to hurt the government. In fact, we very much doubt whether the opposition in Canada to-day would do as well as the present government in the great national crisis. Our object is to bring about a change, not in governments, but in methods.

If the government, or the Shell Committee, would only see the situation with unbiassed eyes they would know that we are doing them a kindly turn in publishing the facts as we have learned them. We are telling them—the Government—what the public is thinking of these matters, and we are trying to do it so plainly that they need have no doubt about our accuracy, or our purpose. We are giving them a cue for future action which is valuable to them.

Moreover, our readers, not having an unbiassed daily press to look to for such a service, must expect us to perform it, and so we propose to go on to the end, and say what we have to say about every one of these things as they turn up. When our remarks are criticized as "canards," we do not mind, but let it be understood that they are not "canards," but fearless statements of the truth.

It is public money that is being spent by the Committee. Let them keep this always in mind. More than that, the people of Canada are making personal sacrifices for the Empire, which should be an example to the Shell Committee. We do not want these sacrifices to be in vain; we want the reputation of Canada to be free from stain. It is the Shell Committee's duty to take this view of the situation and to see that nothing is done under their auspices that can make us feel ashamed of ourselves as a part of the Empire. That is what we are after in our criticisms of the shell box situation.

What we had to say in our last issue was chiefly by way of criticism of the secrecy practised by the Shell Committee in its shell box business. There is no reason under the sun, that we can see, for so much mystery. To make the point clear, we may mention a matter that throws a curious light upon it. We asked the Committee for information of various kinds. We wanted a list of shell box manufacturers who have contracts, and it was refused. We asked for specifications of the boxes, to publish them for our readers who would like to consider the business. No one would be injured by the publication of such information. It would be of no use to the enemy. From the Shell Box Committee, however, we can only get a reply that their instructions are that these specifications shall be given only to manufacturers. Therefore, we cannot have them for publication.

Now, we happen to know that all the time we were writing to the Shell Committee for these specifications and were being refused them a certain man in the city of Montreal with a suspiciously foreign name, who represents a United States trade journal, had blue prints of shells and had visited a large number of the factories which are producing them. The whole affair is ugly and we would like to see it cleaned up, so that we may have a Shell Committee, or a Munitions Committee, as it is now to be called, in whom we would have faith.

Facts About Shell Box Contracts

The alterations made recently in the personnel of the Shell Committee may have far-reaching effects. If they result in more consideration being given to the rights of the public to know something of what the Committee is doing, and to feel sure that its contracts are being let in a fair and businesslike manner, it will be a great thing for the country. In the meantime, however, and until such a change has been put into effect, what we have had to say about the letting of shell box contracts still applies. The daily press have taken up our remarks. The Government press have criticiszed them as a "canard." The Opposition press have reprinted them and with a suggestion for an investigation. We have stated nothing about the production of shell boxes that is not based upon information given us freely by members of the lumbering, or of the woodworking industries; but the Government press criticizes our statements as false, and so we propose to be a little more specific and to show this is not the case.

Shell box contracts are held to-day by parties who should not have received them; while others, who are well equipped for the work, are not able to secure contracts. Firms in different parts of Ontario and Quebec have furnished us with information on both these points, and officials of the Shell Committee, in an interview, have admitted the giving of contracts to a firm, which in the Committee's own judgment, should not have had it. We mentioned particularly, in our last issue, the cases of the Deakin Construction Company and the Cedars Rapids Construction Company, both of Montreal. Officials of the Shell Committee, in an interview replying to our article, say:—"The Deakin Construction Company of Montreal had obtained a contract although not previously having made any boxes. The company proposed to buy the plant of a certain manufacturer. When the Committee learned of the case it undertook to cancel the contract, but reconsidered the matter and allowed it to stand, because the plant had actually been purchased, and 3,000 boxes were partly made. There was some subletting allowed, but it was

only for certain parts of the boxes, and such subletting was all reported fully to the Committee."

There is no necessity to read between the lines in this statement. What it says on its face shows that a firm which had not previously manufactured boxes had secured a contract, even though it had no plant; that it purchased a plant and that the Government, knowing these facts, allowed the contract to stand. In the face of this, how is it that other firms with modern equipment, and large capacity, after applying from time to time for contracts, have been unsuccessful, receiving invariably the reply that the contracts available are all let? How does it come that the Deakin Construction Company were so sure of their position that they went ahead and bought a plant? How did they know that such a proceeding would entitle them to contracts, while other firms, more deserving and owning plants, could not even get a look in?

The interview given out by the Shell Committee says also:—"No contracts were given to any firm that was not engaged in the making of boxes, nor was any subletting of contracts for complete boxes allowed." Then it goes on, as above quoted, to qualify this by explaining the Deakin Company's case, and by saying that such subletting as was done was only for certain parts of the boxes. If the Committee had had the same conception of the public interest as everyone else to whom we have spoken about the matter, the Deakin Construction Company would have been asked if it had been engaged in the manufacture of boxes, and would have been refused a contract, because, in order to do the work it would have to purchase a plant.

As to subletting, the information we have does not square with what the Shell Committee says. Here is what one very large firm says to us:—"Shell box contracts are being placed with such companies as the Deakin Construction Company of Montreal, the Cedars Rapids Construction Company, of Montreal, and others of like nature. We are informed by some regular box manufacturers that they are finding it hard work to get shell box orders direct from the Government, although they are being offered them on sub-contracts. We understand that one large woodworking factory received orders direct from the Government for 25,000 boxes, but made 50,000 on sub-contract." Further information which we have regarding the cases mentioned above is that neither of the Montreal firms referred to is equipped for the manufacture of shell boxes. Certainly, the Deakin Construction Company had no such equipment when it was seeking a contract. We are advised that the Deakin Construction Company are builders of stores, office buildings, etc., and that the Cedars Rapids Construction Company are builders of water power plants. Such firms have no right whatever to contracts for making shell boxes, when many large woodworking plants with splendid equipment are lying idle. If there has not been favoritism to political friends in these cases, we will be greatly surprised.

The position we take is briefly put by one of our correspondents as follows:—"This business should all be placed with firms who have woodworking manufacturing establishments to take care of it, and it should be prohibitory for anyone to sublet contracts received from the Government." This is a straightforward businesslike proposition and the Shell Committee should act upon it; moreover, it should assure the public that its contracts will be given out in such a manner, and put this assurance into immediate practice.

The large new contracts for shells which the Committee now have to place will require similarly large contracts for shell boxes. The Committee states that it has been swamped with requests for these contracts. It certainly knows by this time where the proper plants for this work are located. It cannot excuse itself now by pleading ignorance in connection with new contracts.

We have no political axe to grind. Our interests are those of our readers who belong to both political parties. We want to see the interests of our readers protected against the interests of others who are not entitled to consideration from a business point of view. We cannot believe that the interests of the Empire are served by giving contracts to firms that have to purchase plants and equipment for carrying them out, or to firms that have to construct plants.

In the latter regard there is a striking instance, of which everyone in the trade in Toronto is talking; namely, that of a furniture manufacturing company which was reported to be in financial difficulties. This company has just put up a large building for the production of shell boxes. We are glad to see labor employed in the construction of buildings in Toronto, but in this case the building is superfluous, as other large buildings are ready for the work with equipment installed. The construction of a new plant is an economic waste which should not have been encouraged by the Shell Committee.

* * *

Since the above was written there has appeared in the daily press an interview with Brig.-Gen. Bertram, Chairman of the Shell Committee, making the Committee's excuses for not having handled the shell box business as it should.

Firstly, Brig.-Gen. Bertram is reported as drawing attention to the fact that the Committee has been dealing with millions of dollars worth of orders, and with some 350 or more manufacturing companies. "It is not to be wondered at, therefore," says General Bertram, "if some company, or some middleman puts it over us once in a while." And further, all contracts with middlemen had been cancelled when it had been discovered that they were middlemen.

The members of the Shell Committee were appointed, so the public thought, because they were shrewd enough to prevent anyone "putting it over on them," and cautious enough to enquire whether an applicant is a middleman, before giving a contract.

But have all contracts with middlemen been cancelled? The Cedars Construction Company are carrying out a contract to-day. General Bertram says:—"The Shell Committee has no evidence yet to show that it was not a bona-fide box manufacturer, and the order was given in good faith." We are inclined to give the Shell Committee credit for more shrewdness than this naive admission indicates. They are shrewd enough, beyond any doubt, to have handled this matter differently. We have evidence, which was not hard to find, to the effect that the Cedars Construction Company is allied with the Cedars Rapids Manufacturing & Power Company, and organized for building cement dams.

Would it be difficult to find men in Canada who would be certain to prevent "some middlemen putting it over them once in a while?" That is the kind of men we need for a Shell Committee, not men who have to excuse themselves afterwards.

"The prices we gave were all allowed by the War Office," says General Bertram, "and it is a significant fact that I have been able to save so far $14,896,000 to the British tax-payer by getting the work done that much cheaper than the War Office was prepared to pay."

The poor War Office must be very thankful for this. Of course, it could not be expected to know much about the cost of boxes in Canada. We would suggest that General Bertram really should be one of its members.

Trade with Australia Languishing for Lack of Shipping

The export trade in lumber from British Columbia to Australia was the subject of a letter written to the Canada Lumberman by Mr. Niel Nielsen, Australian trade commissioner to the United States, which we published in the Export Number of the Canada Lumberman on June 1st of this year. Mr. Nielsen analyzed the subject concisely and reduced its problems to practically one, namely, that of shipping. He pointed out that the production and consumption ends of the trade were firmly established; that is to say, that the industry in B. C. is on a permanent footing and the consumption in Australia is already extensive and certain to increase. There was, he said, only one link to add, in order to place this export trade completely upon a sound and growing basis. "We have but one link to add," he said, namely, "stability in the carrying trade. This can be secured if producers and consumers act in co-operation, and only by this means, and until this connecting link is supplied to the chain, the instability of the trade will continue, while the controllers of the freights will

fatten at the expense of both the producer and the consumer." Carrying the subject a little further Mr. Nielsen drew attention to the fact that, in order to secure stability in the carrying trade, we must not only furnish freights from B. C. to Australia, but must work up, in Canada, a market for Australian products, so as to provide return cargoes. Only by such means could we successfully establish a steady carrying trade between the two countries.

These facts are well understood by lumber manufacturers of British Columbia, who are interested in the export trade, and although a great deal has been written and said upon this subject during the past year, the results, so far, are not encouraging. We are led particularly to this conclusion by a report regarding Mr. Nielsen's activities which was published some time ago in an American lumber trade journal. The report said that Mr. Nielsen had been in Portland, Oregon, and had arranged for the purchase by the Australian Government of three ship loads of fir lumber to be sent from Seattle. The report added that Mr. Nielsen, whose headquarters are in San Francisco, had announced that branch offices would soon be established in Chicago and New York for the purpose of encouraging trade between the United States and Australia.

Mr. Nielsen's duties are to do just what this report states that he is doing, but every bit of success that he meets with in this line is a menace to the Canadian export trade, in that it further establishes the supremacy of the United States export trade to Australia. We, in Canada, can have no bone to pick with Mr. Nielsen on this score, but it seems to us that in view of the success which he is meeting, and in view of the very critical market situation existing in British Columbia to-day, greater efforts should be made by the B. C. and Dominion Governments to solve the shipping problem between British Columbia and the big trans-Pacific markets. We know that the shipping problem to-day is more acute and more difficult to handle than it has ever been in the past, but, at the same time, the importance of improving the situation was never greater than it is to-day. So far as we know, all that has been done in the direction of encouraging the trade with Australia is to send Mr. H. R. MacMillan on a trip around the Globe, during which he will visit Australia with the object in view of doing all he can to promote this trade; and we understand, from frequent press despatches, that the lumber manufacturers of British Columbia are devoting some attention to a co-operative effort for improving the demand for their goods in export markets, chiefly however, the markets of Great Britain.

We would like to see practical and immediate efforts taken towards establishing in British Columbia a Canadian line of steamships running to Australia and possibly to other trans-pacific markets. We have frequently been told that the undertaking would be too great. We cannot believe that this is the case. The lumber industry in British Columbia is an enormous one, and without such a means of reaching its export markets regularly, the loss will be infinitely greater than the cost of any line of steamships that might be established. The matter seems to us to be one of co-operation and organization, which can be put through with reasonable speed, if taken in hand by the proper parties and encouraged reasonably by the Government.

This whole problem has recently been discussed enthusiastically by the Vancouver Board of Trade, but it seems to us that they have devoted their attention too much to such matters as the appointment of a customs officer at New York, so as to encourage the trade by way of the Panama Canal with the Eastern States. This is a most important matter in connection with the building up of British Columbia's export trade, but of far greater importance would be the solution of the trade problem in connection with Australia, and the chief effort should be directed along this line.

Labor Minister Criticizes Lumber Camps

It is difficult to understand what may be at the bottom of a report which appeared in the daily press recently, and was followed by other items a little later on; all bearing upon the question of securing labor for the lumber camps, and criticizing the manner in which the employees in the camps are treated during the winter. The chief item which appeared, and the other item which followed a few days later, were regrettable instances of ignorance, and are certain to do a great deal of harm.

The first despatch stated that the Minister of Labor, Hon. T. W. Crothers, predicted a scarcity of labor during the coming winter. In this connection, he is said to have stated that large employers of labor, during the winter months, including the lumber companies, were looking for men and were having a hard time securing them. An appeal had been made to bring east the men who went west for the harvest. It was not likely however, the report said, that such assistance would be granted. "Ottawa lumbermen," the report continued, "and lumbermen of New Brunswick had appealed for men for winter camps. Last winter the camps had no trouble getting men at low wages, but this winter it is hard to get them at any price. The Minister states that a new system will have to be inaugurated by the lumber interests if they are to receive any assistance in securing men. The system by which the men are compelled to board themselves and make their purchases from the companies' stores, must be abolished. It has frequently been found that at the end of the season the men are in debt to the particular company by which they are employed. The companies must board the men and pay them their wages at the end of the month. The suggestion has been made by influential lumbermen that alien internment camps should be released and put to work in the lumber camps. This will not be considered unless the lumbermen can show that they have done everything possible to secure labor at reasonable wages and have failed."

Anyone who knows anything at all about the way in which men are handled in connection with Canadian lumber camps, will know that someone has been misrepresenting the Minister of Labor, or that he is not in touch with the situation. The matter does not permit of argument. The men in the lumber camps of Canada in the vast majority of cases are well treated, carefully looked after, and well paid. Far from the men being in debt to their employers when they leave camp, it is practically the invariable rule that any man who works in the woods during the winter, and does his work conscientiously, leaves in the spring with a big stake of money. During the winter months, he has had good food, good quarters, congenial companions and in short, a great deal more than he would have, had he been working in the city. He has been removed in most cases from the temptation of drink, and has had over him the paternal interest of a large company whose interests are the interests of their employees.

Wherever the companies conduct stores, they carry good lines of clothing, food, medicines and other requisites, in which the men get excellent value for their money. In short, the tendency of camp management for many years has been to do all that modern business methods can conceive of, in order to make the men comfortable and contented, and thereby to secure from them the best return in the way of labor. We are at a loss to account for the strange criticism which is said to have come from the Minister of Labor. We will believe, until we can learn otherwise, that he has been greatly misrepresented.

The Calgary Herald in an editorial article illustrates the unfortunate tendency of the public to take for granted everything that it reads in the way of criticism of big manufacturing interests. Speaking of the stores at the lumber camps, the Herald says:—"Under the system about which Hon. Mr. Crothers complains it is possible for an employer to charge double prices for supplies against the workmen, and he has no redress . . . . Putting it bluntly it is robbery, and if there is anything the Minister of Labor can do to stop it, he will have earned the gratitude of a very large company of men who toil hard for what they should get, but who frequently do not get it."

Putting it even more bluntly, the Calgary Herald does not know what it is talking about.

In the Public Eye

A Budget of Comment on Men and Things of Moment Presented Without Party Flavor

When shall we have the next instalment of that fascinating serial "Too Proud to Fight?"

* * *

Ford says Canadians **must** buy his cars. Dear reader, if you have the price, buy some other car—or walk.

* * *

The Australian Government has pledged itself for good against articles of German manufacture. Doubtless this will be followed by a readjustment of import duties. The while German firms are bidding on the construction of radial brick chimneys and other business in Canada. And there is a faction in the Toronto City Council disposed to consider a literal interpretation of "Love your enemies." May we do unto the Germans as they have done unto us—only may we do it first in future.

* * *

When you are next offered German goods, be it to-morrow or fifty years hence, remember the foul murder of Nurse Cavell by German officers. The uncivilized American red indian at his worst would not have been guilty of such a crime. A protest from the United States? No, dear reader, the United States made no protest.

* * *

Does the western farmer really want free wheat, or is it Jim Hill that is behind the agitation? Where did the money come from that financed more than one deputation to Ottawa? The other day a friend of mine asked one of the delegates who paid his expenses. The reply was that he did not know or care, that he was paid so much a day and expenses. The western farmer is better without free wheat if he only knew it. We don't want free wheat; we want our own industries developed—our elevators, railroads, flour mills, etc., all of which mean bigger markets in Canada for Canadian lumber. By the way, we don't hear any more about free wheat just now. The Chicago price is higher than the Winnipeg price.

* * *

Jim Hill, as we all know, is a Canadian—I mean Canadian-born. Some ten years ago when thousands of U. S. farmers were leaving the several States through which Jim Hill's lines run, for the Canadian prairies, in an address to the St. Paul Chamber of Commerce, he made the statement that the Canadian West would never grow wheat; that it was but a frozen waste, fit only for convicts and fur-bearing animals. But the United Statesers knew better, and the movement north continued in increasing numbers. About this time Jim Hill changed his tactics and began to build branch lines to the Canadian border. He now wants business for these lines.

* * *

President Wilson to the Kaiser—after having been kicked for the 'teenth time: "I hope, Sir, you will be able to explain this satisfactorily."

* * *

It is reported from Ottawa that the Minister of Public Works, Bob Rogers, and General Sam Hughes are not on peace terms. The Honorable Robert Rogers is the type of politician this country would be well rid of.

* * *

Anyone who does not know just why the Shell Committee has been reorganized, may see the point after reading the names of its former members:—

Brig.-Gen. A. Bertram,
Bertram & Sons, Machinists, Dundas, Ont.
Honorary Col. T. Cantley,
Nova Scotia Steel & Iron Co.
Honorary Lt.-Col. G. W. Watts,
Canada Foundry Co., Toronto.
Brig.-Gen. T. Benson.
Lt.-Col. C. Greville Harston.
Lt.-Col. F. D. Lafferty, R.C.A.
Honorary Col. D. Carnegie, M.Inst.C.E.
Mr. E. Carnegie.
Mr. J. W. Borden.

With the exception of the first three mentioned all are employees of the Government. Imagine a meeting of this Committee accepting orders from themselves.

* * *

Here is an absolutely true story from the fighting line in France. One of the brightest and most capable commanding officers sent from Ontario was one day hurrying forward his battalion to support a threatened line of trenches when he noticed a motor car at terrific speed approaching him. To save his men from being run over he halted them. The car, a beautiful $10,000 English car, stopped and out stepped a man in the uniform of a Chief of Staff and shouted "What in h— are you doing here?" My friend, believing himself in the presence of Lord Kitchener or Sir John French, saluted and approached the car to make his report. To his amazement he recognized an old friend, a Canadian real estate man and now an Honorary Colonel—"attached." There is more to this story, but the above serves to illustrate the indignity the really efficient officer is compelled to put up with. The Canadian people undoubtedly paid for this car and its running expenses. This is but one instance of how our money is being wasted and to what Canadian officers are being subjected.

* * *

Shells and patriotism at reduced rates is the latest bulletin posted at Ottawa. Mr. D. A. Thomas had something to do with the price of shells but a federal minister who asked for subscriptions for machine guns is responsible for the cheap patriotism. Subscriptions came with a rush till enough had been received to purchase 1,700 guns and then it was discovered that an order for all available machine guns had been placed long ago. So while they are figuring what they'll do with the money you can become a No. 1 hard patriot by donating the price of a machine gun. And it won't cost you a cent for they can't get the gun.

* * *

Mr. D. A. Thomas, representative of Lloyd George, British Minister of Munitions, has left us—with a rather bad taste in our mouths. To be sure he has straightened out the "shell game," paved the way for the reorganization of the shell committee and arranged that in future all purchases of munitions shall receive the direct attention of Lloyd George whose representative in this country shall be Mr. Lionel Hitchins, former head of the Cammell Laird Company. Mr. Thomas has also assured us that we are a great people with a great country, and that while the Shell Committee may have charged the Mother Land more for shells than they could be bought for across the line, Canada is perhaps entitled to the preference. Despite this diplomatic language, however, Mr. Thomas took the necessary steps to ensure an early cessation of the preference. And despite his honeyed words and engaging smile you cannot help but suspect that when he gets back home he will whisper in Lloyd George's ear that the days of the Empire's stress have bred in Canada a brand of patriot who is worthy to wander down through history hand in hand with the embalmed beef philanthropist of the Spanish-American war.

* * *

But if it is Mr. Thomas' good fortune to leave us with words of cheer on his lips and an openly expressed wish to let the "dead past bury its dead" so far as past sins are concerned, it is perhaps well not to give all the credit to one man that now the Empire is to get a dollar's worth of shell for a dollar from the most loyal of her sons. Since everything is being hushed up and the Shell Committee is being quietly and decently buried, it is impossible to get statements under oath. But private information from the seat of trouble indicates that Mr. F. P. Jones, manager of the Canada Cement Co., had much to do with the upheaval that sent Mr. Thomas home happy and the Canadian Shell Committee into permanent retirement. Mr. Jones like many another went to Ottawa with a tender for shells. When the contracts were let they went as usual to the favored few and Mr. Jones was not one of them. Those contracts were let at prices lower than previous contracts but higher than Mr. Jones' tender. Unlike many another Mr. Jones did not throw up his hands and go home. Instead he went straight to Sir Robert Borden. The Premier was not inclined to listen to a disappointed tenderer but when Mr. Jones turned to the door with a decisive "Very well, I'll give my statement to the press," he was invited to call again in a couple of days. On the second visit he found Mr. Thomas with the Premier. Mr. Jones sat down at the typewriter and made three copies of his statement, one for the Premier, one for Mr. Thomas and the third he kept. That statement showed that the contracts let by the Committee were just $21,000,000 higher than if awarded at the rate of Mr. Jones' tender. A cable to England stopped the contracts before they had been approved by Lloyd George. And in future all contracts for munitions will be open to competitive bids.

* * *

But while it may be policy at this time of stress to smooth matters over so that the fight for the freedom of the world may be successfully carried on, suspicions have been aroused that cannot be set at rest by simply inaugurating a new system of purchasing munitions. Mr. Thomas may diplomatically suggest that "public sentiment will be met by the retirement of the manufacturing members of the committee," but he knows and all Canada knows that such action will stimulate suspicion rather than meet public sentiment. Everybody has heard of manufacturers who have wanted to tender on shells and who were not permitted to even see the specifications; of manufacturers who failing in their attempts to make any headway at Ottawa have on their return home been offered contracts by middlemen; of at least one patriotic manufacturer who offered to make shells at cost and who was never given a chance. All this has been borne with an equanimity born of long experience with politicians and high financiers. The motto has long been "Watch either one but when they get together get both hands on your money and sit on your hands."

* * *

Of course explanations were in order and they were made. It was pointed out that certain concerns, in the early days, had taken risks when shell making was an experiment that might prove costly to the makers and these concerns were entitled to consideration. And probably they were. The earlier price charged the Empire was $5.15 for machining a dollar's worth of shell. This was later reduced to $2.90 for doing the same dollar's worth of work. At these figures one would naturally conclude that it was

the Empire and not the experimenter, or rather contractor, which was entitled to any consideration that was going. Again it was pointed out that policy demanded that the contracts be spread around so as to help relieve commercial depression brought on by the war. And it is only fair to add that this policy has been more or less successful. But is the small man getting the orders? There has been no noticeable commercial depression at or near the concern of which Mr. Thomas Cantley is the head and which is said to be making more profits in a month than it ever did before in a year. Neither is the company of which Mr. G. W. Watts is representative making any complaint of hard times. Of course it is merely a coincidence that Mr. Cantley and Mr. Watts are both members of the Canadian Shell Committee. It is clearly understood that the manufacturing members of this committee are there in a purely advisory capacity and it is probably to clear them of unjust suspicions that some of their names are to be omitted from the personnel of the Munitions Committee.

* * *

But in this case a much larger issue than mere money is involved. That Shell Committee was appointed by the Government, was representative of the Government and consequently representative of Canada. In so far as our dealings with the British Munitions Board is concerned that Committee was Canada. And in this great war, which Lloyd George has said is a war of munitions rather than men, shall it be said that when the Empire called for aid, when the brave men in the trenches shouted for munitions, Canada rushed to their aid with $1 worth of shell in one hand while the other was held out for $5.15? Shall it be said that while we are wont to twit the United Statesers with their fondness for the dollar our own country has outdone them in the hour of the Empire's peril? It is unjust that Canada should be allowed to rest under any such stigma; it is unjust that the manufacturing members of the Shell Committee should be retired under suspicion of having placed such stigma on their native land. In justice to those men and in justice to Canada the shell contracts and the Shell Committee should be given the fullest and most searching investigation. Neither should that investigation be held before any white-washing parliamentary committee. It should be held before a court free from party bias and interested only in bringing out the real facts. In this way and this way only can Canada's name be cleared and the Shell Committee given its opportunity to absolve itself of suspicions that cling to it and will continue to cling so long as efforts are being put forth to cover up its actions.

* * *

To the Empire in her hour of need Canada has given freely of her substance and her sons. She has gloried in the opportunity to prove that her relations toward the motherland were those of a partner rather than a dependent. From the Atlantic to the Pacific Canadians have voiced but one sentiment: that the Dominion must spend her last dollar and her last drop of blood to preserve those liberties guaranteed by the Union Jack and to crush the militarism that threatens the freedom of the world. That is the true Canadian spirit and behind it are united even those who mocked at the German peril and caviled over expenditures towards increasing Britain's naval power. If a few individuals have found, in the nation's hour of stress, their opportunity to make financial gains, all Canada should know it and all the world should be shown that they do not for one instant represent Canada's attitude towards the Motherland. SEARCHLIGHT.

Death of Gideon Shortreed, Hillsdale, Ont.

Gideon Shortreed, for many years prominently identified with the lumber industry in Ontario, died recently at his residence, "Orchardbrae" near Hillsdale, Ont. The late Mr. Shortreed was born at Guelph, Ont., on September 7th, 1845, the fourth son of the late John Shortreed, who came from Hawick, Scotland, in 1832, and settled in Guelph. Mr. Gideon Shortreed joined his brothers, Thomas, John, and George in large lumbering enterprises in Simcoe county in the early seventies. He finally moved to Hillsdale, Ont., in October 1881, and erected a large mill at that place. He had extensive business interests in the Shortreed Lumber Company at Kearney, Ont., in another plant at Claresholm, Alta., and in another in British Columbia. The late Mr. Shortreed is survived by his widow, four daughters and five sons.

Mr. W. A. Cromwell, Eastman, P. Q., widely known throughout the eastern townships as a prominent lumberman died at Sherbrooke hospital recently, after a protracted illness. The late Mr. Cromwell was general manager of the Silver Lake Lumber Company, Eastman, P. Q. He is survived by his widow and three children.

Reports received by the Department of the Interior at Ottawa state that large areas of forests have been destroyed this year by fires along the line of the Hudson Bay Railway, under construction for the Dominion Government between Le Pas and Port Nelson, Man. It is estimated that the burned area will be at least 500,000 acres and that the forest value total will amount to $250,000. In some cases considerable quantities of supplies belonging to railway contractors were also destroyed. The country through which the railway is being built contains considerable quantities of jack pine, spruce, black spruce and birch.

J. M. Donovan Joins Edward Clark & Son, Toronto

J. M. Donovan, Toronto.

Mr. J. M. Donovan, formerly on the sales staff of the Long Lumber Company, Hamilton, Ont., has associated himself with the selling staff of Edward Clark & Son, Toronto, taking up his new duties on November 15th. Since Mr. Donovan came to Canada about two years and a half ago he has become widely known as one of the most active and successful younger members of the trade. In his new duties, we feel sure that he will prove an important acquisition to Edward Clark & Son.

Mr. J. M. Donovan, before coming to Canada, was in the employ of Yates, Daley Company of New York. He has had an extensive experience in the lumber business, having started in 1899 with the firm of Shepard and Morse as office boy, and having remained with them until seven and a half years ago, occupying various positions, such as stenographer, bookkeeper, and general office man. Then he entered the service of a firm in the town of Ellijay, Georgia, where he learned the inspecting end of the business at a sawmill. Next he entered the service of Russe and Burgess Inc., Memphis, Tenn., with whom he secured an excellent training in the hardwood business, which will be of considerable assistance to him in his new work with Edward Clark & Son. With the Memphis firm he had experience both in buying and selling hardwoods, and in inside office work. After this, Mr. Donovan returned to New York and went into the employ of the Yates, Daley Company, with whom he remained until he joined the staff of the Long Lumber Company, Hamilton.

H. W. Larkin to go to the Front

Mr. C. A. Larkin of the Larkin Lumber Company Ltd., wholesale lumber dealers, Toronto, announces that he has decided to retire from active business. Mr. Larkin has been connected with the lumber business for over forty years. Recently, with the object of retiring, he had been giving over to his son, Mr. H. W. Larkin, more of the management of the business than formerly. The intention was that the latter should take entire charge of the business when Mr. C. A. Larkin would drop out of the active work and would be interested in a financial and advisory way only. A short time ago, however, Mr. H. W. Larkin decided that it was his duty to volunteer for overseas service, a decision which his father could not but approve, believing that it is the duty of every family to give of its sons in defence of the Empire.

During Mr. H. W. Larkin's absence the company will confine itself exclusively to the shingle trade, which Mr. C. A. Larkin will attend to largely by correspondence from his residence, 44 Jackes Avenue, Toronto, discontinuing the office at 705 Traders Bank Building, at the end of the year.

After the close of the war, Mr. Larkin, trusting that his son will be spared to return in good health, will then give over to him the active management of the business, and it will be extended to the general lumber business as heretofore.

Mr. Larkin's wide circle of friends in the lumber trade will join in the wish that his hopes in this connection may be fulfilled, and that, at an early date.

Mr. H. W. Larkin is at present taking a six weeks' officers training course at Kingston.

Mr. James E. Dewey, sales maneger of the Stearns Salt & Lumber Company, Ludington, Mich., was married to Miss Laura Zimmerman of Muskegon, Mich., at the home of her parents in Muskegon on Oct. 21st. Mr. and Mrs. Dewey will make their home in Ludington and will be at home to their friends after January 1st, 1916, at 604 E. Ludington Ave.

Commercial Agent F. H. Smith, of the United States Bureau of Foreign and Domestic Commerce, has just returned to the United States from an extensive trip to the Far East and Australia and New Zealand, where he has been investigating the possibilities of marketing increased quantities of American lumber. Considerable lumber from the United States is already used in those sections, and the problem confronting United States producers is the increasing of this trade rather than its introduction.

The Reader's Viewpoint on Trade Topics

Lumber Camp Employees Carefully and Well Treated—Minister of Labor's Criticisms Not Justified—Trade Conditions Improving

Articles or letters to the Editor of the Canada Lumberman, dealing with trade conditions, or discussing questions of interest to manufacturers, wholesalers or retailers of lumber are always welcomed by our readers. Here are a few that have been received lately:—

No Other Class So Well Treated as Woodsmen

Editor, Canada Lumberman:— Ottawa, Ont., Nov. 10th.

We note that the Hon T. W. Crothers, Minister of Labor, has criticized the methods of payment in the lumber camps, and has said also that the lumbermen should board their men, and that at the end of the season the men are frequently in debt to the companies.

We are greatly surprised to learn the Hon. T. W. Crothers is not better informed as to the conditions that exist, in the present day, in the lumber camps of the Ottawa Valley, and we firmly believe that the Hon. Minister of Labor must refer to some other class of work.

For your information we will try and give you an idea of how we use our men, and we think that the other concerns, in fact we know of a great many who do, do exactly as we are doing, keeping in mind that we do not claim to be an exception to the general rule.

Most of our up-river men are hired in Ottawa at the current rate of wages paid for that work, board free. We buy their transportation and furnish their meals en route. When they have worked a few weeks they can draw 75 per cent. of their wages. A great many of them do this, sending their money home to their families. We have to hold back a little to cover the expense of their transportation. If they stay the full season their transportation is not charged to them, but we think you can readily see if we brought men to the woods, where the fares cost anywhere from $8.00 to $15.00, and they only worked a few days, and left us, we would have no protection. On the other hand, when they finish out the season they are not charged for their railway tickets. When the work breaks up in the late spring the men get a final settlement from us. For their convenience, we keep certain lines of supplies in the different camps, where the men can purchase their actual needs, such as moccasins, mitts, socks, under-clothing, etc. They are not charged an exhorbitant price, in fact, in a great many cases, the goods are sold at less than they would be in retail stores in the city.

Regarding the board of the men; we buy the very best food that can be purchased, and a great variety, even furnishing fresh beef, on the hoof, in the early part of the season, and then the cold storage beef in the winter months, and of course there is pork, bacon, sausages, fish, and many other food stuffs, too numerous to mention. We endeavor to engage the best cooks we possibly can, and pay them the highest rate of wages. It is to our advantage to do this, as a good cook, as a rule, is not wasteful.

We will admit there are a few shanty men who never get much ahead. These few will probably stay in the woods for 9 or 10 months, and then come to the city, live in hotels until all their money is spent, and run a large board bill which is charged against them the following season. These board bills the lumbermen are in duty bound to collect for the hiring agencies. This class of men will not work when in the city, and it is probably these few that have been brought to the attention of the Hon. Mr. Crothers.

In conclusion we would say that we do not believe there is any other class of employers who pay and board their men as well as the lumbermen do in the woods.—Shepard & Morse Lumber Co.

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No Grounds for Complaint From Camp Employees

Editor, Canada Lumberman:— Blind River, Ont., Nov. 9th.

The Hon. T. W. Crothers, Minister of Labor, who has criticized severely the method of employment in use in connection with lumber camps, states that at the end of the season it frequently happens that men are in debt to their employers for board, purchases, etc. He says that this must be abolished and that the companies must board the men and pay them their wages at the end of each month.

As you are well aware this condition does not exist amongst the reputable lumbermen, and we doubt if it exists anywhere except in the minds of no account woodsmen. We assume this complaint comes from men from the Ottawa District, and we can well appreciate that some of them come up here and have nothing coming when they leave and for the following reasons.

In the first place they have against them their railway fare, and hiring fee, and very often other advances such as board bills and other advances by the hiring agents, and it also costs something to board them on the way to the camps and to hire liveries for taking them in. Many of them arrive here with nothing but the clothes on their back, which are not suitable for the rough work in the woods, and they have to get clothing from the van, the first thing. So it takes them some time to work enough to pay for their fare and for what goods they actually have to buy in order to work at all; and in a great many cases we are stuck for both the fare that we have advanced and what clothing we have to let them have to enable them to work.

Another reason why some of them have no money when they come out of the woods is that they are poor poker players; still another, that they patronize every jeweler or other pedler who comes along.

We board all our men and never charge a man for board while in camp, unless he refuses to work without a valid reason. There are often rainy days when they do not work at all, and they are given their board just the same. When they are working in any other occupation aside from the woods, if they don't work they have to pay their board just the same, and for seven days in the week. How the Hon. Minister figures paying them every month would improve their condition we fail to see, especially if they were within a hundred miles of a saloon. A man can get money in our camps as often as he wants it, and can get all he has coming to him, and if he had to wait a month before drawing his money there would be a big kick from most of them. The plan is not at all feasible from any standpoint, and I am satisfied the men woold want to go back to the present arrangement if they ever tried the other.

We have no trouble with men we get in our own district and they are perfectly satisfied with conditions. The ones who cause all this talk are from the Montreal and Ottawa District and we think they are preyed upon to a large extent by lawyers.—Hope Lumber Company.

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Camp Employees Well-Treated

Penetanguishene, Ont., Nov. 1st.

Editor Canada Lumberman:—

We are in receipt of yours of the 30th ult. in reference to recent despatch as to the criticism of the Hon. T. W. Crothers in reference to employment of men in lumber camps.

Either Mr. Crothers does not know what he is talking about, or he was talking of some other branch of camps.

Every lumberman knows to his sorrow that he boards the men and that their board is the very best in any employment there is; all along the North Shore of Georgian Bay especially.

The sore part of it is, that we have to pay the workmen's compensation tax on the estimated cost of boarding these men.

In railway camps, where men board themselves, there are usually a lot of Italians who can live cheaply, and these men are sold their supplies. We do not know a better treated class of men than the ones who go to lumber camps. Their work is not heavy and they are well paid, well housed and well treated. The majority of them are paid more than they are worth. The lumber camps just now constitute one of the most serious ends of the lumber business, and unless the cost of taking out can be materially reduced there will be big changes in the lumber business.—C. Beck Manufacturing Co.

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Department Should Investigate Situation Before Criticizing

Editor Canada Lumberman: Keewatin, Ont., Nov. 6th.

We have to thank you for your favor of November 3rd calling our attention to the manner in which the Hon. T. W. Crothers, Minister of Labor, has criticized the method of employment in use in connection with the lumber camps.

We think the honorable gentleman must have had some special instance in mind when he made his statement, and did not mean to apply it to the lumber manufacturers in general. If this statement was meant to apply to the trade as a whole, or to any large part of the trade, we think it would have been better for all parties concerned if he had gone into the facts a little more thoroughly. We consider that statements such as these, based on complaints which might have been made and probably were made to him by irresponsible parties, cause a great deal of harm. We think that he will find upon investigation that there will be no complaints from the men who are willing to give value for the money they receive and that he will also find that men that stay throughout the season will at no time be in debt to their employer.

So far as we are concerned, we board all of the men. We do not charge them for their board should they be laid up in the camp sick. In many cases we have felt that the men were taking advantage of us by claiming they were sick when they were not, but we have preferred to stand the small loss that might have occurred in this way rather than have any controversy over it. If a man, of course, were continually laying up, we would probably invite him to move out, which we consider is our privilege.

In seasons when we have employed a large number of men, we have had a considerable amount of trouble by men representing themselves to be

woodsmen and going up to the woods when they were absolutely useless for this class of work and could not earn their board. Some of these men may have felt that they had been ill-used when they were sent out from the camp and not allowed to stay the season.

Referring to the Hon. Mr. Crothers' statement that men must be paid their wages at the end of the month,—this would mean a considerable amount of work, which, to my mind, would be very unnecessary. Our men are always paid with time-checks on this office, which are payable in cash on presentation.

In conclusion, we think that the Honorable Minister's department might, with a considerable amount of advantage to it, investigate a little farther into the matter covered by the Minister's statement.—Keewatin Lumber Company, Limited.

* * *

Minister's Criticism an Injustice to Lumber Camps

Editor Canada Lumberman:—

With reference to the newspapers' report of Hon. T. W. Crothers' criticism of conditions in the lumber camps.

If Mr. Crothers made this statement ascribed to him, it must have been caused by exceptional cases, as, generally speaking, we think the men in the woods are treated as well, if not better, than similar labor in other classes of employment.

As to the company stores, these are rare on the Ottawa River. The writer does not know of any operated by the larger lumber companies.

In the woods the lumbermen must of necessity carry a stock of ordinary working clothing for the men, but considering the distance these have to be transported, and that, in most cases, they have to be put in the year previous and held over for a year, and figuring the risk of fire and other damage, the price at which these are sold to the men will, we think, compare favorably, quality considered, with the ordinary country store for similar qualities, as in our own case we handle no cheap grades but only lines which will give good service.

With reference to charge for board. We make no charge for board for time lost on account of bad weather conditions. It is customary, however, to charge board for lost time when the men remain in camp on their own accord or from sickness, as, if this were not done, many men would stay in camp much longer than necessary. The charge made by us for board is 75c per day, which is little, if anything, above cost, taking into consideration the fact before mentioned that the supplies have to be put in the year before, and in some cases are hauled as much as one hundred miles from the railroad.

As far as the writer's knowledge goes, the charges both for supplies and board in the lumber camps are decidedly less than in railroad or mining camps, and we think (while, of course, we speak for ourselves and of conditions in our own camps only) that Mr. Crothers' statements do the lumberman generally an injustice.—Ottawa Valley Manufacturer.

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Would Be a Calamity to Operators

Editor, Canada Lumberman:— Bay City, Mich., Nov. 8th.

It would be a very serious matter if we were obliged to pay the woodsmen at the end of each month, as the loss of time of the men would be worse than the paying them off, as they are liable to go away and get on a drunk and be off several days until their money is all spent and no one can successfully run a camp under such conditions.

We pay our men in Canadian lumber camps whenever they want their money and there is never any occasion for them to make any complaint on that score. The men are boarded by us and they get their pay when they want it, providing it is due them. Men often go into the woods without any means whatever and are trusted for clothing, etc., until they have worked sufficient time to pay same back. Otherwise, in many cases, they would not have sufficient clothing, boots and shoes to work in.

It would be a calamity to the lumber operator to be obliged to pay their men every month and we trust that your paper will be able to convince the Honorable Minister of Labor that it would be a bad thing for the lumber business.—Hope Lumber Company.

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No Ground for Complaint in Ontario Camps

Editor Canada Lumberman: Gravenhurst, Ont., November 8th.

Yours of the third to hand in reference to criticism of Minister of Labor on lumber operators, and his statement that men are often in debt for board, purchases, etc., when they leave camp. We cannot imagine what the board could be for unless they lie in the camp and won't work when they might.

As to purchases, we suppose that in some cases they may purchase more than they should. In this section we, and all others that we have knowledge of, pay the men by orders as they require it; we very rarely have charges against the men equal to their earnings, and when this occurs it is invariably when they have not worked long and have come into the camp without sufficient clothing. Men who have worked a month or more invariably have money coming to them; a large percentage if they have worked a month, and all if they have worked over a month. Many do not buy anything out of van.

The custom in this section is, that men are hired at so much per month and board, but can leave when they like and get discharged if unsuitable or refuse to work. Care is naturally taken to see that they do not buy to overrun their account too much, as they can leave at any time. We have never heard any complaint of the nature stated, in this section. The men are paid as they need, while the work progresses, and the balance when they leave camp.

The Ontario law enables the men to put a lien on logs if not paid, whether they are working for a company or for contractors. Possibly the Quebec law is different. At any rate the complaint is one which we have not heard in Ontario for many years.—Mickle, Dyment & Son.

* * *

Should Organize Advertising Campaign for White and Norway Pine

Penetanguishene, Ont.

Editor Canada Lumberman:—

We are pleased to note the evident interest that the Canada Lumberman is taking in the many problems that arise in this industry, and **we would be much pleased if you would go into the matter of having an organized campaign for the advertising of White and Norway Pine.**

We are of the opinion that there is everything to be gained and nothing to be lost from having a strong campaign of this nature.

We note that a good many manufacturers of the other woods have inaugurated just such a campaign with great benefit to the trade. We would be glad to join in anything of this nature but we know how hard it is to move any of the manufacturers and dealers in White Pine.

The Association idea which has taken hold of others and done wonders for them does not seem to grip the minds of the lumbermen.

Some effort was once made along this line but it seems as though they do not want to make a long enough trial to show the advantages of it. We would be glad to hear from you if anything along this line can be instituted.—The C. Beck Manufacturing Co. Limited.

* * *

Western Trade Improving Steadily

Editor Canada Lumberman: Vancouver, B. C., November 4th.

During the last two months there appears to have been a noticeable change in the lumber business as far as orders are concerned. The demand appears to be increasing, and those in the industry here are inclined to be more optimistic as to the future than they have been for the last year.

The foreign trade has helped out considerably, but the mills here look largely to the prairie markets to absorb the greater percentage of their output.

With the splendid crops the central portion of Canada has had this year, which will doubtless bring a large amount of money into the country, the business of the country will be greatly stimulated and the lumber business will get its share of the increase.

We believe that, should the war continue for another year or more, people will look upon it in the near future as a part of the business of the country, and with this idea in view will go on with their business on something like normal lines.

Large orders for shells have been placed here during the last few months and nearly all of the large machine shops are running overtime; this will bring a large amount of money into circulation, which will materially help, especially in the way of pay-rolls.

We are confident that business will improve from now on, once confidence is established in the mind of the general public, money now being hoarded in the banks and safety deposit vaults will be turned into legitimate and profitable channels and the business of the country will go on as if times were almost normal.—Paterson Timber Company, Limited.

* * *

B. C. Plant Unable to Keep Up With Orders

Editor Canada Lumberman: Vancouver, B. C., Nov. 3rd.

Our experience is that there is a noticeable improvement in conditions, for, while from the first of the year up to the first or middle of September we had barely enough orders to keep running, from September 15th until the present time we have been unable to keep pace with the orders that have been coming in, and although we have refused a great many, we are still behind in our shipments. We expect to operate our mills the greater part of the winter, as a number of our customers are already booking ahead for December and January shipments, which, we believe, they intend for spring stocks, as they have an opinion that there will be such a rush for stock in the spring that there will be difficulty in securing prompt shipments. We presume that they also have in view the fact that for the last couple of years the mills have practically been struggling along at starvation prices and that with a revival of business this condition will not continue to exist but will naturally be followed by higher prices.—The Robert McNair Shingle Company.

One of the most interesting indications of improvement in trade conditions in Canada is afforded by the returns of the railroad companies, the condition of whose business is always an excellent barometer of the country's financial and industrial situation. The figures for the three Canadian railroads for the last week of September were as follows:—increased earnings:—C. P. R. $76,000, G. T. R. $13,238, C. N. R. $67,000. Subsequent reports are certain to show much greater increases, as the movement of the grain crop is now well under way.

Douglas Fir Markets in Great Britain

Opportunity Apparently Waiting for Canadian Exporters to Secure a Much Larger Share of Trade—Pitchpine Competition—Prejudice to be Overcome

In a recent report, written by Mr. H. R. MacMillan, special Trade Commissioner to Great Britain, France, South Africa, Australia and other important export markets, which we reproduced in our issue of October 1st, from the Weekly Bulletin of the Department of Trade and Commerce, extensive reference was made to the probable increase in the use of Douglas fir in Great Britain. It was our intention to publish the remaining portion of Mr. MacMillan's report in our issue of October 15th, but unavoidably we were prevented from doing so. The concluding portion of the report we therefore publish herewith, and would recommend those of our readers who have not already studied the first part of the report, to turn up our issue of October 1st and do so. After comparing the trade in Douglas fir with that in pitch pine in Great Britain and also with various European timbers Mr. MacMillan continued as follows:—

Value of a Trade Mark

British timber importers have thus come to attach a great deal of importance to a trade mark and when the brand of a certain shipping firm has become known for uniformly good shipments they will pay a higher price for lumber so branded. Similarly when a certain shipping district has been shown to export timber of a higher quality or superior nature for working, they will pay higher prices for wood from that district.

Custom of Arbitration

As the grades are not clearly defined for the European timbers and as they are so variously applied, the custom of arbitration on shipments has been universal. The buyer, when buying a certain grade, bases his price on what his knowledge and experience of that particular brand has been in the past. The contract allows the buyer 14 days after the arrival of the goods to make a claim for arbitration if the shipment is not satisfactory. If the goods are not satisfactory the buyer and the agent in England, acting for the shipper, examine the shipment to determine if it conforms, not to the theoretical grade, but to the average maintained by this particular shipper in the past for the grade under dispute.

It therefore becomes important for Douglas fir shippers if they wish to avoid claims, to maintain a constant interpretation of grading rules. A shipment that establishes an average quality superior to the grade called for will cause trouble with later shipments if the shipper is not prepared to adhere to this superior standard for future shipments.

Estimation of Grades

The Archangel grades are better than those shipped from the Northern Swedish Gulf, and the Northern Gulf grades are better than those from Southern Sweden. In all districts from five to seven grades are established. There are practically no clear grades excepting the firsts from Archangel. The Swedish firsts contain tight knots up to half an inch in diameter, the seconds up to three-quarters of an inch, and the thirds do not contain so much clear as Douglas fir merchantable. All grades include sap. The remaining grades range down to sixths and sevenths, which will with difficulty hold together. Large quantities of timber are imported unsorted. In the unsorted shipments, there are very few firsts and seconds but chiefly thirds and fourths. The prices given below for the chief grades and sizes in use indicate the possibility of further competition from Canada, when freight rates are again normal.

Prices for Chief Grades and Sizes

Baltic Red Pine per M feet c.i.f. Hull

	I.	II.	III.	Unsorted
3 in. x 11 in.	$43.60	$34.00	$28.00	
3 in. x 9 in.	35.80	31.00	28.00	
2½ in. and 3 in. x 7 in.	29.75	27.00	24.50	
2 in. x 5 in.				$22.00
2 in x 6 in.				23.70
2 in x 7 in.				24.50

Baltic White Spruce per M feet c.i.f. Hull

	I.	II.	Unsorted.
3 in. x 11 in.	$35.30	$30.50	
3 in. x 9 in.	31.00	28.50	
2½ in. and 3 in. x 7 in.			$24.50
2½ in. and 2½ in. x 6 in.			24.00
1 in. x 9 in.	34.00	31.00	

Archangel Red Pine per M feet c.i.f. London

	I.	II.	III.	IV.	Unsorted.
3 in. x 11 in.	$42.15	$37.35	$25.20	$19.20	
3 in. x 9 in.	39.60	32.55	24.00	21.60	
2 in. x 6 in.	30.00	24.00	20.50	18.75	
2 in. x 6 in.		35.00	27.00	24.20	

Archangel Spruce per M. feet c.i.f. London

3 in. x 11 in.	$30.00	$24.50	$22.00		
3 in. x 9 in.	25.20	21.40	16.60	.....	
2 in. x 4 in.	.....	28.50	.....	.....	$23.70
1 and 2 in. x 9 in.	28.00	24.40	19.00	.....	

Sizes in which Canada Can Best Compete

The sizes for which the prices are given above (with the exception of the 2-inch by 4-inch) those which are the most expensive to produce in Europe and therefore those in which Canada can compete to the best advantage. Large quantities of all the above sizes are used. The prices given are those ruling before the war. Taking into consideration the constant depreciation of grades and increase in prices in Europe, there is a very good prospect that a market will be found for the low grade material from British Columbia that shippers are now finding it difficult to market, when sawing export orders. When freight rates again become normal it should be possible to draw up the specifications for United Kingdom cargoes so as to take a larger proportion of the log than is taken at present.

The British tradesman is known to be conservative. He is slow to buy a new article if the old one may still be secured in the grade to which he is accustomed and at a price which he can pay. He has also a long memory for any defect or supposed defect which the new article may show at its first trial..

Ignorance re Properties of Douglas Fir

These characteristics have greatly affected the use of Douglas fir. Many people say that Douglas fir is well known in the United Kingdom and that its greater use is simply a question of price competition with pitch-pine. It is true that if it were sold at a price considerably lower than that of pitch-pine the volume sold would be rapidly increased, but it is quite as true, that if it were better known much larger quantities would be sold at the prices at which it was offered c.i.f. before the war.

Opinions in Vogue about Douglas Fir

Opinions concerning the properties of Douglas fir differ diametrically in different parts of the country. A surprising number of timber merchants, architects and engineers are strongly of the opinion that Douglas fir is not so strong nor so durable at pitch-pine. This belief is very widespread and must be overcome before Douglas fir will sell as well at pitch-pine and at the same price throughout the United Kingdom. Many persons who have never used Douglas fir, or who have had a shipment damaged in transit are convinced that fir is not fitted for permanent construction because of its short length of life.

Other prejudices and opinions heard several times from merchants and important timber users were that fir is unsuited for interior finish because it does not hold its place; that it is not so suitable for interior work in ships because it does not hold screws; that it has not so attractive a grain as pitch-pine and is not therefore so suitable for interior finish; that it is not sufficiently hard and even grained to fit it for use in manufactures.

The people who hold these beliefs are buying pitch-pine even where fir of a superior quality is offered at the same price because they are firmly convinced that fir is unsuitable for their purposes. The opinions are worth considering. They show in some cases that the person holding them has probably received a shipment which arrived in poor condition, as many did when the timber went around the Horn by sailing vessel. They show also that the market will be greatly increased, when the buyers are all satisfied as to the qualities of the timber.

Expert Opinion Partly Determines Market

That these opinions should be shared concerning a high-priced wood like Douglas fir by such persons as timber merchants, engineers and architects is unfortunate. A cheap wood is only used for cheap purposes and its reputation is not easily hurt, but a high-priced wood is usually purchased for a purpose where particular

qualities are demanded, and is also usually purchased on the advice or specification of an architect or engineer or such expert.

The full possibilities of Douglas fir therefore can only be realized when the architect, engineers and such experts as the timber purchasers of the big shipyards, railroads and industrial companies have been convinced as to its merit.

Uses of Douglas Fir in Great Britain

This will be accomplished partially by force of example in Great Britain without outside help. At present one or two railways use Douglas fir in all buildings and bridges, and in car construction. Many others will not use it as yet because they believe it is not strong nor durable enough. One shipbuilding district, Glasgow, uses it extensively for docking; other shipbuilding districts will only use it on the cheapest boats and then only on small jobs. A few architects specify fir or allow fir to be used for joists. Many architects for spans of over 30 feet, name pitch-pine only. Nearly all textile mill engineers specify pitch-pine or other hard woods for rolls in which large quantities of timber are used in the north of England. One firm has been using Douglas fir for years in 4¼-inch by 4¼-inch clears and has found it satisfactory. In one dockyard district fir is used for staging and planks, in all the others it is only admitted where long lengths are required. Once or twice builders were met, who had used Douglas fir for interior finish with excellent results, but the general opinion expressed among builders and timber merchants was to the effect that it was not adapted for such uses. In all the industries named the fact that fir has obtained and maintained a foothold in the past is almost a proof that it will be used in greatly increased quantities throughout the industries in which it has made an entry.

Fir to Replace Pitch-pine

Opinions and habits change slowly in Great Britain but the change from pitch-pine to fir is likely to be assisted by the growing price of pitch-pine and the inevitable deterioration of quality due to the exhaustion of the forest, which is now seen in the small logs and large proportion of shortleaf and loblolly shipped. This deterioration of quality and increase in price, well recognized in the timber trade in England affords an excellent opportunity for supplying engineers and architects with definite information on the durability and strength of Douglas fir. Architects should also be furnished with information as to the best method of varnishing and staining the wood for interior finish. The treatment of fir in this manner is not understood in Great Britain.

Douglas Fir Used by War Office

The use of Douglas fir by the War Office will be of the greatest assistance in broadening the market. There was a large stock on hand in the country when war broke out. Since that date, the arrangements made by the Department of Trade and Commerce that the War Office and Admiralty should use Canadian Douglas fir as far as possible instead of pitch-pine have led to the importation directly, by the Government and by dealers selling to the Government, of between 40 and 50 million feet. This timber has been used for poles for military telegraphs, tent poles, pontoons, military bridges, trenches, railway sleepers and many articles being manufactured in connection with the war. The bridges, pontoons, poles and other manufactured articles were produced in woodworking shops throughout the United Kingdom. After having worked on the timber for months these proprietors are much more likely to buy it for their future work. The fact that it is accepted for War Office work is an important item in its favour.

Effect of S. S. Service

The frequent liner service from pitch-pine ports to all English, Irish and Scotch ports has been of great advantage in developing the pitch-pine trade. A merchant could buy any specification of pitch-pine large or small and have it delivered in less than a month. At the same time if he bought fir he had usually to take a cargo, wait two to four months or more, and run the risk of the cargo deteriorating. The interest charges also increased the cost of the timber to the consumer. Naturally only a few merchants were in a position to buy the timber under such conditions, and they bought it only in specifications unobtainable in other woods.

The present liner service from Douglas fir ports, though not nearly so good as from pitch-pine ports, is already encouraging many merchants to buy Douglas fir, who never bought it before. The effect of this new custom will be cumulative. It will be difficult to develop the markets on the west coast of England, until a liner service is established with the western ports.

Wood Used in Great Britain

Not nearly so much wood is used in the interior trim of buildings in Great Britain as in Canada. The use of plaster, wallpaper and other substitutes is much more general. The floors are covered with linoleum or carpet. The use of wood is restricted to doors and windows with their casings, to floors which are for the greater part covered, to baseboards and to stairways.

Such wood as is used may be divided into two broad classes. The very cheap which is heavily covered with paint, and the very good which is given a natural finish.

The very cheap is overwhelmingly the more important of the two and is used in all buildings excepting the best class private dwellings, public buildings and a small proportion of offices.

Price of Doors in Use

The doors are imported manufactured. The cheapest doors for workmen's houses cost 76 cents each c. i. f. London. A size very much used 2 feet 6 inches by 6 feet 6 inches by 1½ inches, moulded both sides, costs $1 each c. i. f. A half glass door costs $1.24. The great majority of doors are comprised of the above classes. A better class pine door is imported chiefly from the United States at $1.50 to $1.75 each.

In certain parts of the country, e. g., Dublin and the Scotch cities, the labour unions will not allow the importation of ready manufactured doors. Elsewhere the doors are all imported in stock patterns at prices ranging between those quoted. The doors come chiefly from Sweden, Canada and the United States and are made of very low grade timber, little better than pine box lumber. The doors imported at $1.50 to $1.75 are not nearly as good as the fir veneer doors selling wholesale for the same price in Canada. The purchasers of the doors, which are imported ready-made, do not demand a good door. They want a cheap door, that will look fairly well when painted. The doors used for the best class of buildings are all manufactured locally from oak, mahogany or other high grade hardwoods, both solid and veneered.

The Grade of Flooring Used

The flooring used in nearly all buildings are sound but very knotty. Both spruce and redwood are used. Large quantities are imported from Norway and Sweden ready manufactured, and the remainder is dressed in Great Britain from imported lumber. The sizes are ⅞ inch x 5½ inch-6 inch; 1 inch x 5½ inch-6 inch-7 inch and 9 inch; and 1⅛ inch x 4 inch-6½ inch, and the sizes most commonly used are the 5-inch to 7-inch widths. Most of the flooring is dressed both sides and both edges and is square-edged. The quantity of tongued and grooved flooring used is not great. All flooring imported is flat-grained. The prices before the war were c.i.f. London:—

Swedish flooring—	Per M. feet
1-in. x 6-in. redwood	$23.00
1-in. x 7-in. "	24.00
1-in. x 7-in. whitewood	22.75

Samples of Swedish flooring which are being sent to the Commissioner of Commerce illustrate the grade used.

Moulding, Ceilings, Linings and Baseboards

The moulding, ceilings, linings, baseboards and other specially manufactured finish is not imported in the manufactured form, but is manufactured to order in the various woodworking establishments chiefly from Swedish redwood. The patterns vary throughout the country. The linings and ceilings or "matchwood," as they are called in England, are manufactured from lumber imported at $20 to $25 per thousand. Ordinarily the finished article is very well manufactured but full of knots. Common sizes are 6 inch x 9/16 inch, ⅝ inch, ⅞ inch or 1⅛ inch, double V-jointed. Other sizes are used which vary throughout the country. The price at which this lining is sold to builders is given here:—

⅝ in. x 6 in.	36 cents.
⅞ in. x 6 in.	48 "
1⅛ in. x 6 in.	60 "

Pitch-pine floorings are used in public buildings. Imported sizes are 1¼ inch x 6 in, 7 inch, 8 inch, cost about $67 c.i.f. for rough clears. The 1¼ inch x 7 inch-8 inch is cut and dressed to 1⅛ inch x 3 inch matched.

In halls and public buildings 3-inch x 3-inch pitch-pine blocks are used, 2 feet or more in length, sawn edge-grained. The normal price is about $28.80 to $33 per thousand feet.

Mahogany, Oak and Teak

Various species of mahogany, oak, teak and other hardwoods, which are comparatively cheap, and of which large stocks are carried in Great Britain, are used for finishing the best class of buildings. Mahogany sells for from one shilling to six shillings per cubic foot, depending on the variety and is used in very large quantities.

Probable Market for Douglas Fir

The wide Douglas fir clears imported during the past two or three years have been used to a certain extent for interior finish. As the builders and architects become more familiar with the use of fir

finish they will use it in large quantities. The chief sale will be in clear boards and planks for floors, inside joinery such as staircases and panels. The growth of the trade may be expected to be slow. Three-ply fir veneer is adapted for the uses as panels, for which wide clears are purchased and if put on the market, should gradually develop a sale.

It is quite certain that if the use of Douglas fir in Great Britain should suddenly increase rapidly, Canada would only share to a limited extent in the growth of trade. The present organization of the trade is such that out of eleven agents or brokers, who handle over 98 per cent. of the Douglas fir imported into Great Britain and to the continent, eight represent American shippers and two of the others do a small liner business.

Canadian timber shipped to the British market by American shippers loses its identity and loses the natural preference that would be given in that market to Canadian timber where prices and quality are equal. Further, when Canadian mills submit their quotations to American shippers on inquiries from the United Kingdom, they can on the average only expect to secure the business, when they quote several cents a thousand or even more below the American mills. Whereas, if they quoted through Canadian firms, who have established reputations as reliable shippers, they would doubtless get the business, if they quoted the same price, or even a little higher than the Americans.

Present Situation Favourable for Canada

A situation now exists, which is to the advantage of the Canadians. Canadian timber is believed to be closer grained than American and more valuable. Sentiment furnishes a further very evident preference for Canadian goods. But lumber even though loaded in Canada, if shipped by a firm in Washington, Oregon or San Francisco comes into the market known only by the name or brand of the shipper and is not known as Canadian lumber.

Reasons for a British Columbia Shipping Company

There are several reasons why a strong shipping company should be formed in British Columbia to handle the exporting of Douglas fir and other woods.

1. Reputable firms of agents or brokers long established in the trade in Great Britain, possessing valuable connections throughout the timber industry both in the United Kingdom and on the continent could be secured as representatives for such a shipping organization. All inquiries of importance would then go direct to a centre in Canada from which they would be distributed to all mills in a position to export.

2. If an export trade of any volume is to be established from any district, there must be continuity of shipments, and there must be at least one organization in that district competent to handle any kind of an inquiry, otherwise the trade will drift to the district in which those organizations exist. A shipping company would receive all inquiries and make sure that quotations were received, and distribute large or unusual orders amongst the manufacturers so as to produce the best results. The whole productive capacity of the industry could be brought to bear on the market in the most effective manner.

3. The British buyer wishes to buy on a contract including an arbitration clause as he does in the United States. The shipping company could buy from the mills on the inspection certificate and sell to the United Kingdom on the usual form of British contract.

4. The best asset a shipper or timber-producing district can have in this market is a good reputation. A shipping company, which looks carefully after the filling of specifications and the condition of shipments, branding all timber shipped under its contract, could build up a more valuable reputation for the lumber-producing territory of Western Canada than would be developed by a number of mills working separately or through American shippers. The establishing of a good reputation for shipment to the United Kingdom market is the surest way to increase prices and meet competitors successfully.

5. As soon as freight rates become normal again the British market will take a larger proportion of lower grades of Douglas fir than hitherto. The American lumber shippers doing a large volume of business, both visit the market frequently and have the best-informed timber agents and brokers in the country working in their interests. They will, under such circumstances, be in the market first, and the Canadian manufacturers, if acting individually and without a direct connection with the British market can only follow the Americans.

A Surprising Revelation of Canada's Resources

Ludington, Mich., Nov. 9th.

The Canada Lumberman & Woodworker,
Toronto.

We want to congratulate you on your issue of Nov. 1st. This was certainly a very ambitious number and was a surprising revelation of the resources of Canada, at least in the line of wood manufacture.

Both typographically and editorially, the Canada Lumberman is one of the best trade publications received by us and we feel that it is no more than just that this should be acknowledged. We believe you are right about the part which Canada is to play in repairing the ravages of the present European War. We believe that the results which will come to the Dominion therefrom will impart to it the greatest impetus in its history.

Yours very truly,
The Stearns Salt & Lumber Co.
A. M. Johnston.

How the "Permit System" Works in British Columbia

British Columbia has had the permit system for regulating land-clearing fires, in effect for six fire seasons, and has maintained a staff each year sufficient to supervise the granting and use of permits. Six years' successful experience has convinced practically every citizen that the system of fire permits is a valuable conservation measure.

Burning permits are required over the whole province with the exception of small, well settled communities where the forest areas are much broken up by clearings. Permits are required from May 1st to September 15th for clearing land, for agriculture, and for clearing any debris along roads and railways, around camps and mines, or logging slash. Permits can be obtained only from the regular forest guards and rangers, and Dominion wardens, and municipal authorities who may be granted special power to issue them. Written permits only are allowed and the regular permit form only is used.

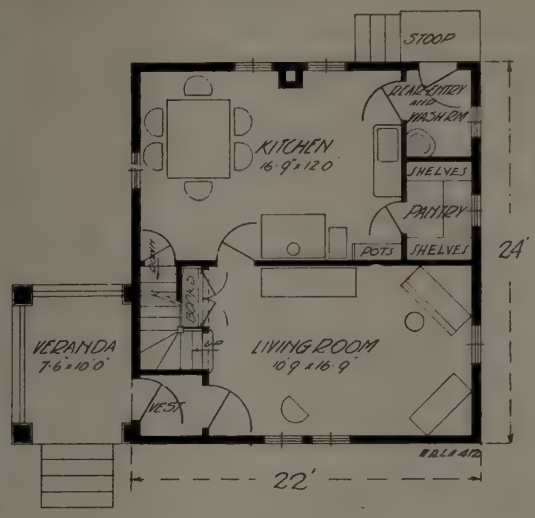
In 1914, 346 provincial guards and rangers issued 11,523 permits for burning brush. There is naturally a certain amount of hazard in almost every clearing fire, but so well has the issuance of permits been supervised that in only 128 cases did the fire get away. The permittee must do all in his power to prevent a permit fire getting beyond bounds. Before a permit is issued the guard or ranger inspects the area to be burned to determine whether or not it can be burned with safety, and to see if fire lines have been made around the edge, or in some cases he demands that the brush be piled. The fact that due care has been exercised is shown by the fact that only one per cent. of the fires set out under permit got away. In every case this season such escaping fires were controlled with little damage. The permittee is responsible for the control of such fires.

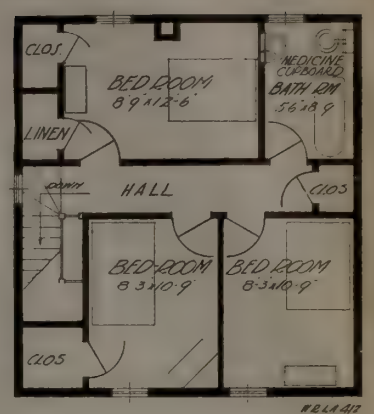
Forty thousand and four acres of agricultural land were burned over under permit during the fire season of 1914, besides 5,727 acres of logging slash, 7,204 acres of slash along railways, and 290 miles of slash along public roads.

During particularly dangerous periods permits may be refused in the hazardous districts until rain falls. During 1914 and 1915 such temporary refusal has been necessary in various parts of the province.

In general, however, the obtaining of permits is made as easy as possible consistent with safety. Frequent patrol trips on the part of the forest guards, and the arrangement of his trips so that his territory is systematically covered, and so that settlers become familiar with his movements, are the chief means to this end. The forest guard soon becomes familiar with land-clearing operations in his patrol district, and thus is able more easily to be in the neighborhood when permits are wanted. Also his familiarity with slash which he knows the owners desire to burn during the summer, enables him in many cases to recommend burning at a particular time, and by giving the owner a permit at such a time the area is cleaned up while conditions are right. After several years experience an observant forest guard will become expert in burning slash cheaply and safely.

In every way slash burning is facilitated by the staff of guards, while at the same time such burning is rendered quite safe. The settlers who are in the majority of cases familiar with the results of bush fires through observation of old burns and through occasional accidental fires which get away, are ready to co-operate to prevent the recurrence of fires. No province in Canada has a better public sentiment in the matter of fire protection. The permit system chiefly has been instrumental in building up this sentiment. The forest guards have often very large districts in their charge (average 500,000 acres in 1914), but are assisted in the work of fire detection through settlers reporting fires by telephone or otherwise, and even by starting fire lighting while the while the fires are small and before the arrival of the forest officer. British Columbia can properly claim to have already an effective fire protection system, which system is improving each year. It is undoubted that the fire permit policy is the basis on which the whole system rests, and is the most valuable provision in the fire protective chapter of the Forest Act.





GROUND FLOOR PLAN SECOND FLOOR PLAN

View showing one of the many varieties of home buildings contained in the plan books of the Western Retail Lumbermen's Association.

Western Retailers Issue a Plan Book

We have drawn attention recently to an interesting development which has been worked out in connection with the retail lumber trade of Western Canada, and which is of special interest, not only in that part of the country, but throughout the east as well. We refer to the publication by the Western Retail Lumbermen's Association, Winnipeg, Man., of a plan book, containing plans of model houses, especially interesting to farmers, though at the same time of interest to other classes of people, and which may be built at a cost ranging from $500 to $6,000. For each design, plans such as a builder would require, may be secured free of cost from any of the members of the Association, and they are in a position to quote practically to a dollar, the cost of any of the structures described and illustrated in the book. These plans have been drawn by a specially engaged staff of men all thoroughly versed in architecture and familiar with the requirements of Western Canada. The designs are such as will require standard grades and sizes of lumber and standard building materials in general, a fact which makes it possible to reduce the cost of the buildings to a great extent, at the same time providing that they shall be comfortable, convenient and attractive. The plan book includes designs not only of houses, but of barns, silos, portable and permanent granaries, etc. Practically every building required by a western farmer is covered, including horse barns, general barns, cattle barns, implement sheds, hog pens, poultry houses, dairy and ice houses, farm elevators, garages and other buildings. There are designs of a simple and inexpensive class, and others of large structures suitable for farming on an extensive scale.

One of the illustrations shows the design of a typical farm house, specially suited for western farmers. After studying this design for a few minutes our readers will form a definite idea of the practical nature of the plan book. Another illustration shows an implement shed for housing a tractor and separator, in addition to smaller machinery.

The Secretary of the Western Retail Lumbermen's Association is Mr. N. G. Neill, Winnipeg, Man., and the President this year is Mr. W. D. Galvin, both of whom are to be congratulated upon the successful outcome of their efforts in the above direction. Over 25,000 copies of the plan book have been issued.

Campaigning Against Forest Fires

The Canadian Forestry Association, through their new publicity bureau, have commenced an active campaign directed towards educating settlers, in timber districts, to appreciate the great loss resulting annually from forest fires, and to persuade them to do their utmost to prevent such loss. The latest move in this direction is the publication and distribution of many thousands of copies of an interesting pamphlet, bearing upon its cover a striking covered illustration of a forest fire. "More than 1,400 of these reckless forest conflagrations occur in Canada every month between April and December," the pamphlet says. "The loss during the summer of 1915 was $10,000,000. Part of that sum belonged to you." Other interesting quotations from the pamphlet are as follows:—

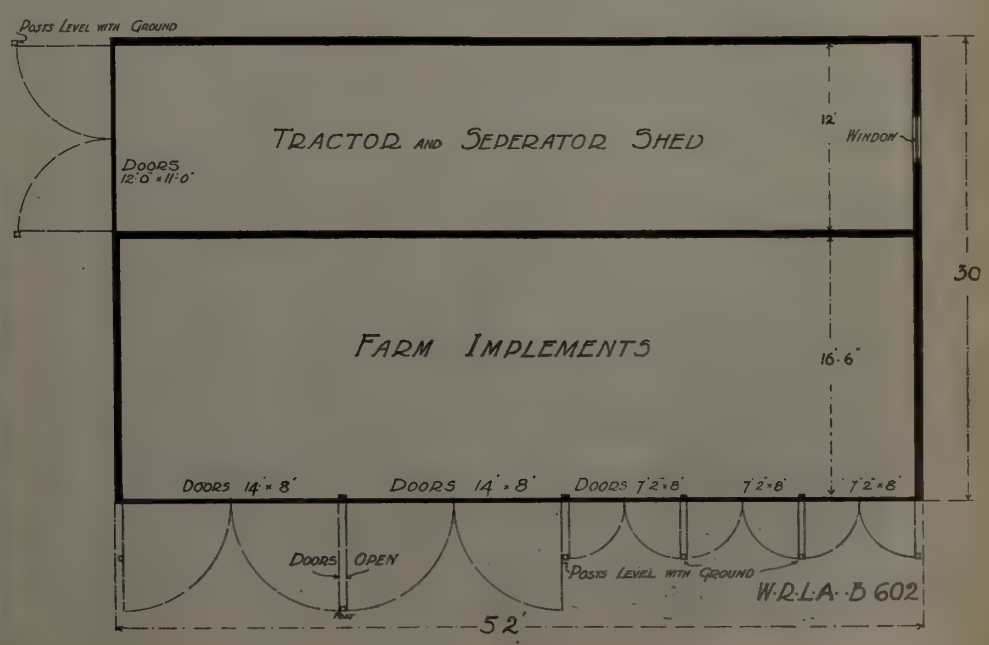
"Every year—this year, as well—we burned down three or four times as much of Canada's timber as the lumberman cuts. Imagine tramping down four times as much of your corn as you haul to the barn! The two cases are parallel, except that the loss of a timber crop costs enormously more to replace."

"More than 12,000 forest fires, large and small, occur in Canada every 12 months—about 1,400 a month between snow and snow."

"Certain parts of the United States, all of Switzerland and France, scarcely know what a big forest blaze looks like. Why? Because the people and their legislators have made up their minds that a forest fire is a common thief, that it robs the woodsman of his employment, robs the farmer of his markets, hurts the fertility of surrounding lands, causes both flooding and drying up of streams and puts up the cost of lumber for every citizen in the land."

"The forest timber helps to keep you, even if you live in the middle of a treeless plain."

"Take away the $200,000,000 that the Canadian forests pour into



An implement shed built to house tractor and separator, in addition to the smaller machinery.

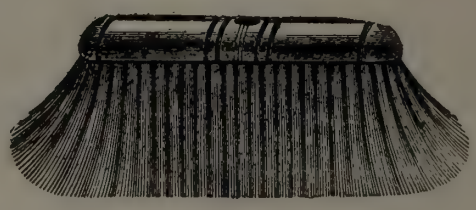
the pockets of the community in cash every year and practically every community would cry 'hard times.' "

"You cannot escape the profits of a standing forest and you cannot escape the losses of a burned forest."

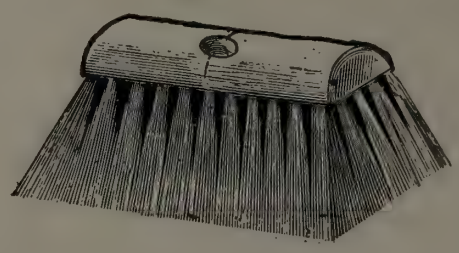
"You can stop forest fires. You can first practice care whenever you are in or near the woods. Then you can see that your neighbor does not offset your care by his carelessness. Furthermore, you can talk to your local members of the legislature and parliament, and tell them that the people want a thorough system of fire ranging and will back the best forest laws that experience has evolved."

English Enquiries for Broom Stocks

In a report to the Weekly Bulletin of the Department of Trade and Commerce, Mr. J. E. Ray, Canadian trade commissioner at Birmingham, Eng., reports that manufacturers of brushes and brooms are inquiring for "stocks," that is, the head into which the bristles are inserted. Birch is the wood in general use, but a similar kind



10½ to 14 inches.



11 to 16 inches.

7 to 10½ inches (in blade).

of timber might be considered suitable. Samples have been forwarded to the Department of Trade and Commerce, Ottawa, and the accompanying illustrations will furnish an idea of the requirements of the market.

Direct from the Forest to the Market

The accompanying illustration gives an interesting and forcible example of the opportunities for the development of Canadian trade which have been developed by the Panama Canal. It is just one instance of the fact that British Columbia, on account of its numerous excellent harbors, its great forest resources, and the marketing facilities presented by the shortening of the route to important export centres, has before it a most encouraging future, if its manufacturers and merchants take advantage of all these facilities and develop the export markets in a businesslike manner. The vessel shown in the illustration, the steamship Admiralen, is shown loading a cargo of 4,000,000 shingles at Green Point Rapids, B. C. These shingles are for direct shipment to New York, by way of the Panama Canal. They have been manufactured from timber practically at tide water, in a mill which is able to load direct upon the vessel, at its own wharf. The cargo will therefore, be laid down in New York at probably a less expense between the saw and the consumer than any previous shipments of shingles to that market. The shipment was made by A. P. Allison and Company, Green Point Rapids, B. C.

An interesting shipment of B. C. Shingles to New York.

A U.S. Logger's Opinion of The American Seaman's Act*

"Because we have few suitable ships for the foreign trade on the Pacific, many camps are closed, many mills are silent. The foreign ships on which we depended find the food and munition trade with the warring nations so remunerative that there is little space or thought of lumber excepting for military purposes. Legitimate trade languishes because the one conspicuous failure in our economic progress is the development of our Merchant Marine. Relatively and actually it is less than sixty years ago. Then 90 per cent. of our foreign trade was borne by American ships. To-day the figures reverse. The record is one of economic inaptitude and inefficiency most discreditable to the genius of America. The crowning act of folly was the so-called American Seamen's Act which has driven the splendid fleet of the Pacific Mail to the Atlantic under the flag of a foreign corporation and turned over the carrying trade of the world to our commercial rivals.

"Our flag is already gone from our few important ships on the Pacific; it will go from them on the Atlantic when the stress of war passes. We cannot by law invite foreign sailors to desert in our port in violation of their contracts and our treaty obligations. That provision has been declared inoperative by our Department of Justice after protest by all the maritime powers. We may build up a lake and coastwise marine no matter how onerous the legal handicap, by the simple expedient of shutting out all foreign ships. That we have done, but on the world's highway we have trimmed our sails to every political breeze and our ships are water-logged."

Reducing Risks in Logging Operations

I had expected to get data from each state and province represented in this Congress, throw them all together, and then give you the comparative figures to show you what this branch of the industry is doing towards killing and maiming employees, but on account of the difficulty of getting reliable data from the states where there is no workmen's compensation law, and the different methods of classifying accidents in the states that have, I could not do this, but I am going to give you some data from the State of Washington which I obtained through the courtesy of the Industrial Insurance Commission of that state.

Under the workmen's Compensation Act there are 48 classes of hazards, and No. 10, under which our industry is classified, is subdivided into seven subdivisions as follows: Logging, sawmills, shingle mills, lathmills, masts and spars, with or without machinery, wood saws and land clearing. Now in 1913 we find that the claims paid out for the one subdivision, logging, amounted to more than fifty per cent. of the whole amount paid out for Class 10, and during this same period this subdivision only contributed 35 per cent. of the funds of class 10.

I am going to give you some figures for the fiscal year October 1, 1913, to September 30, 1914. The total number of injuries coming under the jurisdiction of the Industrial Insurance Commission was 12,586. Of this total 5,946 were chargeable to class No. 10, and of this number 2,093 were in the logging subdivision, 377 of these were in the mechanical class and 1,716 in the non-mechanical class. In the mechanical class, 372 were caused by cables, causing a time loss of 12,583 days to workmen. In the non-mechanical class, 272 were caused by trees which caused a time loss of 9,692 days; 506 were caused by rolling or moving logs with a time loss of 22,760 days; 141 were caused by cross-cut saws, with a time loss of 2,308 days.

Again these figures do not include our logging railroads, which are covered by class No. 1, and are subdivided into two subdivisions, as follows: Railroads other than logging railroads, and logging railroads. In class No. 7 for this fiscal year there were 227 mechanical injuries and 537 non-mechanical injuries, a total of 764 for the year. Of these a little more than forty per cent. were on the logging railroads.

The total number of injuries in all industries in Washington

* From President J. J. Donovan's address before Pacific Logging Congress.

coming under the supervision of the Industrial Insurance Commission for this fiscal year was 12,586, with a time loss of 357,010 days, representing to the employees a loss in wages of more than one million dollars. These figures cover injuries to workmen alone and do not include fatal or permanent disability accidents. These figures are for the state of Washington alone, and from information I have from other states and the Province of British Columbia, I must say they are all about in the same class or proportion.

When we consider this enormous accident list with the loss of time to the employees and loss of efficiency and inconvenience to the employers, is it not time for us to wake up and see what we can do to stop some of this loss to all concerned? Do you realize that statistics show us that one man out of every ten employed in the logging industry is injured each year?

The next question that comes to us is this, "What is the cause of all this?" Is it on account of the rough ground over which we must work? Is it on account of the large timber we handle? Is it on account of lack of interest in showing our employees about their work? Is it because we are careless about the class of machinery and supplies which we buy? Is it because we do not keep our machinery in proper repair? Is it on account of the carelessness of the workmen themselves? Is it on account of the incompetence of the men we employ in the woods? We will find that each of these causes contribute to the list, but carelessness undoubtedly contributes more to this than all other causes combined.

Next why so much carelessless? Is it because our men are less intelligent than other classes of workmen? I say, No. Let me tell you that the Demon Booze is the greatest contributor to our accidents through the channel of carelessness. I know I am called a crank on the liquor question, but I am glad to notice the number of cranks among the members of this Congress is increasing at an astonishing rate, and I hope it will not be many years until we loggers are all cranks on this question.

I have spent over twenty years in the lumber game, and most of that time has been in charge of logging camps, saw and shingle mills. While part of this time I have had charge of small operations, a good part has been in charge of large operations, and during that time I have never lost one of my working lives. I have yet to get my first man killed. I do not know how soon it will come to me. I want to tell you right here that I think the principal reason I have never got a man killed, is on account of my being a crank on the liquor question. Another cause is my carefulness about giving careless men positions of responsibility, where they have the lives of their fellow workmen in their keeping. I follow this up more closely than a great many men do and try to eliminate careless workmen even if their work is of a minor character.

For example: I have a brakeman on our train who is inclined to be careless, and I do not think he would make a good conductor even with sufficient experience. I want to get rid of that men as soon as possible and get a man whom I think, with sufficient experience, will make a good, careful conductor. If I have a man as fireman that goes away periodically and gets on a spree, I do not want that man, as sooner or later he will be called on to take charge of the engine, and we do not want an engineer whose brain is muddled with the effects of liquor. If I find a man on our rigging who is too careless to make a good hook-tender, I don't need him, as he will some day expect a position as hook-tender and would be entitled to it. If I find a man anywhere that is careless about his own safety, even if he is not in a position where he is responsible for the safety of others, you may be sure he is not the right man and, perhaps after years of employment not be able to be promoted to a place of responsibility. There are thousands of young men in the country who would be careful and would appreciate any interest we take in them and would be willing to take the places of the careless workmen.

Now we find in Washington during the fiscal year 1913-1914 that there were injured by trees alone 272 with a time loss of 9,692 days, and there is no doubt in my mind but that ninety per cent. of these accidents were caused by careless workmen, and no doubt a good percentage either directly or indirectly due to liquor. A man goes away for a week's spree after one, two or three months' work and comes back only because his money is all gone and he can buy no more booze. We are inclined to say, "Oh, well he will be a good man for a few months now until he can get another stake saved up," but he is not a good workman, his mind is numbed from the effects of drink, he is sluggish and only wants to get through as much work as possible to keep his mind off liquor. He falls a tree but forgets to give the signal, "Timber" until too late; the tree falls on some bucker, maims him for life or perhaps kills him outright; and perhaps he leaves a wife and several children on the charity of the world. Who is blamed for this? Certainly not the bucker. Is it the feller whose mind was affected by the drink? Is it the foreman who allowed him to go to work where he had the lives of others in his hands, or is it our own fault in not prohibiting the use of liquor in our camps and not giving our foremen proper instructions about not employing men who periodically go on sprees?

Another source of our trouble is through the dissatisfied workman; the man who always has a grouch, and who does not have any interest in his work except to draw his pay and do just as small an amount of work as possible to keep his position. One man of this kind can do more in a week towards making a crew of careless workmen than we can undo in a month. Just as soon as the seeds of dissatisfaction are planted in a man's mind, just then he becomes negligent and careless. If we find a man of this kind in our crew we should at once set in to ascertain the cause of this dissatisfaction and, if it is our fault, remedy it. If not our fault then get rid of the man. I want to tell you right here that too often we find our foremen of careless nature; too ready to risk an inefficient machine too long; too ready to take personal risks; too ready to be grouchy and dissatisfied. What can we expect from our men with a foreman of this kind?

Gentlemen, you may think me clear off the safety first topic, but safety first is for nothing more than the prevention of accidents, and to prevent accidents we must first find the cause and eliminate it. When we buy a new machine for our logging woods we will, very naturally, buy one of the most efficient pieces of machinery we can get, and the manufacturers have, no doubt, made this machine as safe as they know how, and if we will see that it is properly installed and that the blocks and cables are kept in proper repair, we can keep our mechanical injuries down to the minimum. But as the figures which I have given you show that almost eighty per cent. of our accidents are of a non-mechanical nature, such as felling trees, rolling logs, etc., therefore our Safety First campaign should be more with our workmen's conduct and not so much to our machinery. Now do not understand me to say we are paying too much attention to our mechanical work; far from it. I say, watch it more closely but begin to watch your men and particularly your men in charge.

Last year some of our friends from Washington said their industrial insurance was costing too much. We were told at that time by Mr. Daggett that forty per cent. of the expenditures were for claims where the workmen were out less than two weeks. Now if by eliminating these small claims you can save forty per cent. and by a rapid campaign for the slogan, "Safety First," you could cut the other claims fifty per cent., that would leave your cost only thirty per cent. of what it is at present, and I believe a lot of us would then either come to Washington to log or get busy and try to put our states and province on the same basis.

Has it paid other industries to take up a campaign of "Safety First?" I remember when I was a boy that to see any of our young men seek a position as brakesman on the railroad was equal to seeing him march out under military colors to war. We concluded it was only a matter of time until he would return home in his coffin or maimed in some way. What is the result of a Safety First campaign by the railroads? We find the New York Central with their thousands of workmen operating through the year 1914 without the loss of life of an employee. One of the best examples we have, I think, is the Safety First campaign of our street railways and the amount of good they are doing. They not only have to educate their employees, but must educate the public as well. It is the same with steam railways, and a good example of what has been accomplished by them is in the fact that the Canadian Pacific Railway carrying its thousands of passengers daily had not, up to a few months ago, lost the life of a passenger for over two years.

Now we can, if we will give it the proper attention, do just as much for our own industry. We hear a great deal about the rough ground and the size of our timber, but I want to tell you I am not speaking from theory but from practical experience, when I tell you that my accident list has been smaller here on the Pacific Coast than in yellow pine camps of the Southern states. We have here heavier and more efficient machines to do our work, just in proportion to the difference in the size of our timber.

I have told you that I had never lost the life of a workman, but I do not want you to understand me to say that I have never had an accident. I have had and expect to have some, as long as I follow the lumbering game. I have had two men each lose a leg and one man lose an arm, and I must confess that in each case it was due to the carelessness on the part of someone. One case was when the superintendent of a large yellow pine operation, a man who was continually careless about his own safety, was discharged, only to be taken on by another foreman some miles distant. He decided to go from the car in which he was riding to his work to the locomotive, and this on the second day of his employment in this department. Result: a fall, the loss of one leg to him. Our loss: two years' litigation in the courts, in which we won but with a monetary loss of several thousand dollars in court costs. Another case only three years ago in British Columbia, in order to save eight minutes' time in returning to the bunk house after the day's work was over, the foreman allowed his men to ride an empty car down a very heavy grade and the car left the rails. Result: one of our best and most careful

men, a young man in the height of manhood, lost one of his legs, maimed for life and is now working in a restaurant in Victoria. Our loss: the work of a good and careful man and a monetary loss of nearly three thousand dollars.

Will a Safety First campaign pay? Is it worth our while to get out printed pamphlets containing Safety First rules for each of our workmen? Will it then pay us to see that these rules are lived up to and when we find a man who is not living up to them let him go to seek a position where the hazard is not so great?

Now I know some of our members here are now doing this, and these remarks are for those who are not.

We seldom go into a manufacturing plant of any kind but we find placards posted warning employees of danger and bearing instructions as to the safest way to handle each machine. How often do we find any placards up to warn loggers of danger? Now why is this? It certainly is not that we have less intelligent men in the logging woods than in any other industry. Then let us get busy and raise our industry from this low level as to accidents to our workmen.

Lumbering Conditions in the Okanagan

Some interesting matters are touched upon in a report recently submitted to the Hon. the Minister of Lands from the Vernon district. Seventy-two outbreaks of fire during the season, with but slight loss, are recorded, and mention is made of the increasing interest shown by the public in forest protection. Much clearing was done by settlers under permit, the season proving very favorable. The opinion is expressed that the lumber industry, in view of the conditions, has shown wonderful activity. Thirteen mills have been running fairly regularly; those in the Okanagan supplying boxes and crates for the fruit trade, as a result of which employment has been given, and the machinery kept going. Approximately three hundred men have been employed at the mills, and a somewhat smaller number in logging operations. Orders for several million feet of fir for snowsheds on the Coquihalla Branch of the Kettle Valley Railway have been given.

The whole district has benefitted by the operation of the Kettle Valley Railway, and will do so to a far greater extent as soon as the Coquihalla section is connected up and opened, completion of which should be made by November.

A Modern Plant at Winnipeg

One of the newest and most modern woodworking plants in the city of Winnipeg is that of the Acme Sash and Door Company. The machinery is of the best and most modern design, and the plant is driven throughout by electricity, furnished by the Winnipeg Electric Street Railway Company. The sash and door factory is 107 feet in length and 72 feet in width, two storeys high. The equipment includes:—one No. 108 Berlin 12-in. sticker, one 8-in. American sticker, two Berlin cut-off saws, one Canada Machinery Corporation dado saw; one Berlin self feed rip saw; one Jackson-Cochrane rip saw, one 30-in. surface planer, two Berlin jointers; one sanding machine, one combination saw; one band saw; combined shaper and jointer; one tonon machine, one sash sticker, one new Britain chain mortiser; one sash relisher, in addition to a full equipment of sash clamps, veneer presses, etc. The estimated output of the plant is of a monthly value of $35,000.

Mr. George Cahoon has been elected president of the Laurentide Company, Grand'Mere, P. Q., in succession to the late Sir William Van Horne. Mr. C. R. Hosmer succeeds Mr. Cahoon as vice-president, and Mr. J. K. Ross fills the vacant position of director caused by the death of Sir William Van Horne. Mr. George Alexander has resigned as secretary, and Mr. W. F. Robinson has been elected in his stead.

According to a report received from a civil engineer recently arrived at New York from Finland, the wood pulp industry in Finland has been seriously affected by the war, and the stoppage of exports to Germany. Many factories which, previous to the war, employed a great number of hands, have closed down.

Many large vessels carrying cargoes of lumber are at present tied up at the western entrance of the Panama Canal as a result of the great land slide in the Culebra cut, which has temporarily blocked the canal. Much of this lumber is for urgent shipment to the United Kingdom and to points in Europe.

At a recent dinner of the B. C. Forest Club, Mr. E. A. Sterling was the guest of honor and addressed the club upon "The Promotion of the Use of Forest Products."

Should Patent Attorneys Guarantee Their Services?

It is not many years ago since many manufacturers would not hold themselves responsible for the quality of their products. The purchaser took all the chances. To-day the manufacturer makes his goods up to a standard and he guarantees to the retailer that they are of a certain quality. The retailer passes on the guarantee to the purchaser, who thus knows what he is getting, and that, if there is any failure to come up to the quality guaranteed, he can get his money back. Manufacturers who sell guaranteed goods are constantly pushing to the front, because purchasers will always prefer their product.

This policy is being carried out to-day, not only in connection with manufactured products, but also in connection with service of various kinds. It is especially applicable, as a policy, to the business of a patent attorney. The government keeps records of all patents granted, and these records are open to all who wish to look through them. How many manufacturers, or inventors take advantage of this fact and have the patent records been searched when they are interested in a question of patents? Most manufacturers send their invention to a patent attorney and ask his opinion about it. Is it patentable? Some patent attorneys will make what is called "a desk search," that is, they will look into the invention and advise their clients whether they consided it to be patentable. After such a search they will perhaps advise the client that it is patentable. This is frequently the cause of misunderstanding and expense to the manufacturer. An invention may contain patentable features and be of a somewhat different construction from inventions already patented, but be, at the same time, "unpatentable" because prior patents are sufficiently broad to cover the patentable features of the invention.

The most certain way of securing dependable reports upon the patentability of inventions is to consult patent attorneys with offices in Ottawa, who are able to search the government records personally. A still further safeguard is provided by the firm of Harold C. Shipman and Company, Ottawa, who, not only make personal search of the patent office records, but, if they find no other invention patented which would be infringed on by the invention under construction, they furnish a Certificate of Patentability in which they certify that they have made a search of the patent office record. They also back up the certificate by a guarantee, that if an application for a patent on the invention be filed through their firm, they will, if it is finally rejected, refund the fees paid them for preparing and prosecuting application.

This is a businesslike proceeding on the part of Harold C. Shipman and Company, and they advise us that their business has increased greatly since they adopted this policy. It gives their clients confidence and assures efficient and prompt service.

N. W. L. A. Executive Considers Important Matters

A meeting of the executive committee of the National Wholesale Lumber Dealers Association was held on October 28th and 29th, at New York, and a number of important questions and reports were considered. Those present were Gordon C. Edwards, Ottawa, President of the Association; W. W. Knight, Indianapolis; F. R. Babcock, Pittsburg, and M. E. Preisch, Buffalo. One of the most important subjects considered was the re-classification of lumber and lumber products as proposed by the Interstate Commerce Commission. The seventeen questions asked by the Interstate Commerce Commission were given most serious consideration. Full reports were heard as to the Chicago Conference in September, and within a short time an announcement will be made as to the association's position on this subject. A recommendation was adopted authorizing the committee to get certain information from the members with a view of proposing some improved form of fire insurance protection among the members of the association.

Mr. Peter Lund, formerly of Wardner, B. C., has moved to Lethbridge, Alta. Mr. Lund has spent 16 years in south western British Columbia and southern Alberta, and has built up one of the largest lumber manufacturing and timber holding concerns in B. C., under the name of the Crows Nest Pass Lumber Company Ltd. Mr. Lund states that logging operations this winter will be quite general along the Crows Nest Line. Mr. Lund recently resigned the active management of the Crows Nest Pass Lumber Company, but has retained his interest in it, and will continue to act as resident director. He is also president of the Western Canada Lumber Company Ltd., Lethbridge, Alta., which operates retail yards at the principal points between Lethbridge and Calgary.

At a meeting of the Canadian Pulp and Paper Association, held on November 5th, two addresses were delivered by Mr. T. H. Wardleworth, of the National Drug and Chemical Company of Canada, Limited, and Mr. A. D. Huff, of the Laurentide Company. The former spoke on the aniline dye industry in Canada and the United States, and Mr. Huff discussed the freight rates situation.

The Place of Logging Engineering in Forestry*

By Judson F. Clark, Vancouver

The aim of the art of the logging engineer is to lower the cost of harvesting the forester's crop. A lower cost of harvesting means higher stumpage values.

The foundation of forest finance is stumpage value. The forest has many values aside from its stumpage returns, and these values are often of the utmost importance to the community as a whole, even from the financial standpoint, but—the inevitable but—it is the stumpage that pays the bills and makes possible and profitable the practice of forestry.

It will, I think, be readily conceded that the greatest hindrance to the progress of forestry in this country is the low stumpage values. In Europe, where labor is much cheaper and stumpage values several-fold higher than with us, forest properties may be maintained on a perpetual yield basis and pay a fair return on the investment. What obtains in Europe to-day will obtain in America to-morrow. The practical question is, "How may we hasten it?" In a large measure the answer to this question will be found in the development of the art of the logging engineer.

Stumpage is that which remains when the cost of marketing the forest product has been paid from the returns from the sale. Obviously, there are but three ways of increasing stumpage values. We may do so by raising the price of the product, by eliminating waste, or we may reduce the costs of marketing. Unhappily, the price of lumber, the main forest product, is determined by a great variety of considerations, most of which are wholly beyond the control of the friends of the forest.

The utilization of materials previously wasted makes slow progress. There have not been nearly so many by-product developments as could be wished, and every step in advance—no matter how rich in early promise of good financial returns—largely defeats its own hopes on account of the overwhelming supply of raw materials on the one hand and market limitations for the product on the other.

Until such time as lumber prices substantially and permanently advance, the main hope of bettering forest finances and thereby widening the field where forestry may be practised, rests in the lowering of the costs of marketing the forest crop.

The cost of marketing the forester's crop may be roughly classified as logging costs, milling costs, lumber transportation and selling costs.

The sawing and finishing of lumber, together with lumber transportation, have already been highly standardized. No doubt many further economies will be effected in these departments from time to time. A start which has every promise of large results has already been made in the heretofore much neglected field of lumber salesmanship. But perhaps the largest field for economies is that of logging, and the hope for greater efficiency in this quarter is in the development of the art of logging engineering.

As the art of the farmer in producing the crops that feed and clothe the nation calls to its aid so much of the sciences of chemistry, physics and biology, so the logging engineer in the development of his profession takes toll from the whole field of the mechanical science, and, hardly less insistently than the automobile manufacturer, calls for much of the best that has been produced by that modern alchemist, the metallurgist. No occupation calls for greater resource and adaptability. Every logging unit differs from every other in a complexity of variations in topography and stand, and of the thousand ways in which the logging may be done there are not many ways that admit of profitable results, and there is, of course, only one best way.

The man who knows and can effectively carry out one or more of these better ways is a potential logging engineer—and the logging industry is proud of the many conspicuously successful loggers who are daily adding to our knowledge of the art, to the dignity of the profession, and to their bank accounts.

The successful logging engineer of the past has been a man who has compelled success by a more than average ability and adaptability. How may the average logging foreman improve his methods and thus take the first steps to qualify as a logging engineer? Must it not be by bringing to him the results of the best thought of the thousands of men who are devoting their lives to this work?

The trade journals have done a very great and ever-increasing service in this work, and must ever be the least expensive of our educational resources. The Pacific Logging Congress has brought together the leaders in the profession, to their very great mutual benefit. It has also influenced a fringe of the rank and file. The trade journals and the Logging Congress will continue to be increasingly useful in their special fields of activity, but it is to the schools that we have a right to look for leadership.

I would suggest that the time has come when the schools should provide for specialization in their forestry instruction. Such specialization would enable students looking forward to government service to prepare either for administrative positions or for silvicultural work in all its broader aspects. For the students who look forward to private employ, the specialization will be along the varied lines of forest engineering. The specialization called for in the past for private work has been very largely along the line of modern methods of forest survey. For the future may we not hope that specialists may find a wider and still more remunerative field in various lines of lumber manufacturing and utilization, in lumber merchandizing, and especially in the department of logging engineering.

The graduate of the forest school, with a special training in the department of logging engineering, may hope to be of considerable service to a logging company from the start, but to be of the greatest service in the end he must be willing to start his practical apprenticeship at the bottom and work up. This may mean sixty dollars a month or it may mean forty. The coming logging engineer will choose his company and then compel them to take him on if he has to volunteer his services at the start. Once in the harness his sole aim will be to make himself indespensible to his company, and the man who combines ability with a thorough training in the fundamentals of his art will quickly arrive. Having mastered his profession and having established a reputation, a successful logging engineer may hope for a large and remunerative opportunity as a specialist who will determine the method of operation best suited for any particular combination of stand and topography, and perhaps supervise the installation, leaving the less difficult task of operation to cheaper men.

There is perhaps even a larger work than that of training the logging specialist open to the forest schools in the development of a course for the average logging foreman. A four or six weeks' course for this class of men, without entrance qualification other than a desire to learn, in which all the latent and best ideas in the art would be combined, and wherever possible studied in practical operation, would be of the greatest value. Camp construction and sanitation, economy and efficiency in the boarding department, camp accounting and welfare work, would be some of the subjects to be included with the more picturesque problems involved in the bringing of the logs to the rail or water and thence to the mill.

It is not impossible that the forest schools would find in this direction their very greatest usefulness in promoting business economy, and therefore conservation. It would not be an unreasonable hope that such a course would result in a five to ten per cent. cut in average costs with the average foreman attending. Not the least value of this economy would be its effect in making possible (by making profitable) a closer utilization of the lower grade materials.

To sum up, then, logging engineering is at present our best hope for the larger stumpage returns so necessary for the extension of forestry methods. In the past it has been developed almost entirely by practical men who have had but limited opportunity to know and see what the other fellow was doing. For the future, the forest schools should become clearing houses for information discovered and better methods developed all along the line, and thus become at once the source of supply for our specialists and the training ground for our every-day foremen loggers.

* Address before Pacific Logging Congress.

B. C. Wants Customs Officer at New York

Business men of British Columbia have taken recently a strong interest in the proposal for the appointment of a Canadian customs officer at the port of New York, so that customs regulations may be complied with in the transportation of Canadian goods between eastern and western Canada, by way of the Panama Canal. They presented a memorial on the subject to Premier Borden and the Minister of Customs through their local member of Parliament, Mr. H. H. Stevens. Unexpected delay in securing results from this memorial led to a joint meeting of the Trade and Commerce and Transportation Committees of the Vancouver Board of Trade, at which the following resolution was adopted:—

Whereas, this joint meeting of the trade and commerce and transportation committees of the Vancouver Board of Trade has been called for the purpose of considering the question of the development of the British Columbia ports, with which the growth of our cities and interior territory is closely allied;

And whereas, the British Columbia Boards of Trade have applied to the Minister of Customs for the appointment of a Canadian Customs inspector at the port of New York, so that the customs regulations could be complied with in the transportation of Canadian goods from Eastern to Western Canada, and vice versa;

And whereas, such transportation via the Panama Canal would greatly benefit the shipper and consumer for the following reasons:

(a) The consumers of British Columbia would be enabled to purchase in Eastern Canada more advantageously much of the goods which they are now obliged to purchase from foreign market.

(b) Conversely, the return cargo for ships would be the grain of Alberta and British Columbia, the lumber and wood products, canned salmon and other fish, fruit and food stuffs.

(c) The fact that the Panama Canal has greatly shortened the trade routes of almost all of Canada's competitors in the foreign trade makes it incumbent upon British Columbia to avail herself to the utmost of that route, both in her foreign and in her inter-provincial trade.

It is resolved that it be imperative that if the British Columbia ports and Western Canada are to get their proper and legitimate share of the increased outbound and inbound trades that will follow the Panama Canal route, and if these ports are to keep pace with the other Pacific ports in which such elaborate preparations have been made for the increased trade, and are to utilize the harbor improvements and other transportation facilities that are now under construction in British Columbia and Western Canada, the application of the British Columbia Boards of Trade be granted without further delay.

And it is further resolved that a copy of this resolution be sent the Honorable Sir Robert Borden, Premier of Canada; the Honorable Sir George E. Foster, Minister of Trade and Commerce; the Honorable Dr. J. D. Reid, Minister of Customs, as well as to our own Premier, Sir Richard McBride, and to every British Columbia member in the Dominion House of Commons.

Last Block Business Going to United States

A despatch from Cadillac, Mich., says:—"The Williams Bros.' Lumber Company has again benefited as a result of the so-called war order placed with eastern shoe manufacturers for 3,000,000 pairs of boots for Slave soldiers. This concern received two inquiries from eastern last manufacturers for large size last blocks and it is the belief of the company that the lasts will be used in the manufacture of Russian boots recently ordered. Still more recently the company received a telegram from one of the inquirers requesting that a carload of large size last blocks be shipped immediately." Canadian manufacturers are in a position to handle this business, and ought to be more vigorously on the lookout for it.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted-Lumber

Slabs and Edgings

Slabs and Bundled Edgings, Hardwood and Softwood. Quote cash prices. Box No. 248, Canada Lumberman, Toronto, Ont. 19-22

Wanted

10 cars 2-in. Hard Maple or Birch Common and Better. Apply Box 258, Canada Lumberman, Toronto. 21-24

Wanted

Birch and Soft Elm 1 in. to 4 in. dry or new cut. State quantity and full particulars. The London Lumber Co. Ltd., London, Ont. 22-25

Wanted

100,000 Cedar Ties.
1½ in. and 3 in. Maple, Beech and Birch Lumber.
2 and 3 in. Soft Elm, 2 in. Rock Elm.
Dry or new cut. State quantity you can supply, and when.
Box 250, Canada Lumberman, Toronto, Ont. 21-24

Wanted Lumber

Soft Elm, 1½ in., 2 in., 2½ in., 3 in., 3½ in., 4 in.; also Birch 1 in. and 1½ in. Describe fully with lowest cash prices to Standard Hardwood Lumber Company, Owen Sound, Ont. 19-t.f.

Wanted to Buy

15 million feet White Pine, Red Pine, Spruce, and Hemlock. Also Lath. Box 259, Canada Lumberman, Toronto. 22-25

For Sale-Lumber

Lumber for Sale

100,000 ft. Spruce 5th quality and better, 3 x 3 8/14 ft. $15 per M. ft. 50,000 ft. Spruce and Hemlock Culls, 1 & 2 3 x 3 at $12.50.
One Million No. 1 & 2 1¼ in. cull Lath at $1.50 on cars Manseau Savoie & Co., Manseau, Que., on I. C. R. 22

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

700,000 ft. 3-in. Hard Maple, No. 3 common sound hearts, 6 in. and wider, band sawn, good stock, dry.
400,000 ft. 6/4 Maple, No. 1 and 2 common, dry. Address Box 256, Canada Lumberman, Toronto, Ont. 21-22

Wanted-Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra.
Minimum charge 25 cents

Thoroughly experienced lumberman in all branches from stump to consumer wants position with wholesaler or manufacturer. Box 261 Canada Lumberman, Toronto. 22-23

Woods superintendent wants position, twenty years' experience with teams and railroad equipment of all kinds. Pine, Hemlock and Hardwoods. All kinds of ground. Will go any place. Can furnish good references. G. O. Sharp, Reynoldsville, Pa. 19-22

Situation Wanted

Agent or Manager—lumbering or pulpwood operations—for immediate engagement—confidential reports on lumbering establishments. Address "Forester," 222 Sanguinet Street, Montreal. 22-22

For Sale-Machinery

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Machinery For Sale

One 150 h.p. Stationary Engine; two 75 h.p. Tubular Boilers; two Resawing Machines (with Circular Saws). Savoie & Co., Manseau, Que. 22

For Sale

Log Hauler, built by Alex. Dunbar & Sons; also several sets of sleighs. Address:
DENASTON BREAKEY,
Breakeyville,
21-24 Co. Levis, P. Q.

For Sale

Logging Equipment
R. R. Locomotive
Logging Sleighs
Snow Plows
Hoisting Engines
Chain, etc.
Box 257, Canada Lumberman, Toronto 22tf

Saw Mill Machinery For Sale

Second-hand Machinery for Complete Saw Mill, all practically new, in excellent condition, including Bullwheel, Steam Kicker, Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8-ft. Waterous Bandmill, 5-saw Slab Slasher, 48-in. Edger, Trimmer, also Independent Lath-mill, and Filing Room outfit. Power Plant complete. Offers accepted for all or any part. On view at the Waterous Engine Works Company, Brantford, Ont.

For Sale

Shanty Plant and Alligator Log and Tank Sleighs complete. Snow Ploughs, Blankets, Cookery outfit and all equipment necessary for logging operations. Box 260, Canada Lumberman. 22-22

Saw Carriage

One No. O "E. Long Mfg. Co." Right Hand Saw Carriage with separate 20 ft. Trailer, total length 37 ft. Saw Frame with Top Saw Rig. Cable Drive Attachment. Complete. Used only a few months, bargain for immediate purchaser. Williams and Wilson, Limited, Montreal, Que. 22-22

Miscellaneous

For Sale

Copies of "The Preservation of Structural Timber," by Howard F. Weiss. Published in 1915 by McGraw-Hill Book Company. 312 pages, illustrated. Price $3.00. Canada Lumberman, 347 Adelaide Street West, Toronto.

In the Supreme Court of British Columbia

Judicial Sale

of the Assets of McLelan Lumber Company, Limited

Vancouver Trust Co. Limited
vs.
McLelan Lumber Co., Limited

PURSUANT to the Order of the Supreme Court of British Columbia dated the 8th day of October, 1915, there will be offered for sale by public auction by Thomas Shirley, Esq., at his office, 615 Hastings Street West, Vancouver, B.C., on Monday, the 6th day of December, 1915, at 12 o'clock noon, the properties and assets of the McLelan Lumber Company, Limited, as follows:—

PARCEL I.

Freehold Mill situated at Ladner, B.C., on Fraser River, 6½ miles from mouth, 17 miles from New Westminster. Site comprises 8 acres land with 1450 feet deep water frontage. G. N. R. rail connection. Mill capacity 100 M. per day. Equipped with steam drag saw, endless chain, steam kicker, loader and nigger, friction overhead canter, Schaake carriage, 4 block 60 in. opening, power set works, 12-in. steam feed, 40 ft. capacity, 9 ft. single cut Willette bandmill, 14 x 4 Wickes gang self contained, 8½ x 54 Schaake edger, 15 saw slasher, 11 saw band lift trimmer.

Power Plant.—1 pair Lane Bodley twin engines 17 x 24, 3 boilers 72 x 18, 1601 b. steam, Dutch oven setting, 1 combination fire and feed pump 10 x 8 x 10.

Planers.
1 Berlin No. 10 10 x 30 sizer (separate building).
1 48-in. Sheldon fan.
1 Berlin No. 91 high speed flooring machine.
1 Berlin No. 108 Moulder.
1 Berlin No. 257 self feed rip saw.
1 60-in. Eagan Resaw.
4 Swing cut-off saws.
1 Double 55-in. Sheldon fan.
Grinding room, complete equipment, attached to planing mill. All planers equipped with electric driver.

Kiln.—1 wooden kiln 19 x 63. Capacity 35 M.

Yard Equipment.
54 2-wheel lumber trucks.
1 one horse trailer.
24 Factory trucks, 5 waggons.
2 dump carts, 2 refuse cars.
3 heavy horses and harness.
2 sets dump car harness.

Outbuildings.
2 dry stock sheds.
1 stable.
1 wharf shed.
1 blacksmith shop and equipment.
1 office and furnishings and fixtures.
1 7-room dwelling, partially furnished.

PARCEL II.

Freehold land at Read Island, about 188 acres, including half million feet (estimated) standing timber, store and post office building, hotel building with lean-to, dining hall, 2 cottages. All built of finished lumber, painted and in good repair.

PARCEL III.

Logging and camp equipment, including 5 donkey engines with equipment and outfit for 2 camps.

The property will be offered en block, and failing sale en bloc, by parcels as above, and bids may be made for the purchase of the whole property en bloc or for any one of the above described three parcels.
The property will be offered subject to a reserve bid.
For further particulars, terms and conditions of sale and inspection of inventories and a full description of properties offered for sale application may be made to Oliver Allan Murphy, Esquire, Receiver, 614 Pender Street West, Vancouver, B.C., or to Messrs. Deacon, Deacon & Wilson, Bank of Ottawa Building, Vancouver, B.C., or copies will be forwarded by mail upon application to the undersigned.
Dated at Vancouver, B.C., this 1st day of November, A.D. 1915.

DEACON, DEACON & WILSON,
Bank of Ottawa Building,
Vancouver, B.C.
22-22 Vendor's Solicitors.

What Does This Mean?

The following despatch, coming from Ottawa recently, had widespread publicity in the daily press, and evidently was inspired:

The Minister of Labor, Hon. T. W. Crothers, predicts a scarcity of labor during the coming winter. He states that big employers of labor during the winter months, including the lumber companies, are looking for men and are having a hard time securing them. An appeal has been made to bring east the men who went west for the harvest. It is not likely, however, that such assistance will be granted. Ottawa lumbermen and lumbermen of New Brunswick are appealing for men for the winter camps. Last winter the camps had no trouble getting men at low wages, but this winter it is hard to get them at any price.

"The Minister states that a new system will have to be inaugurated by the lumber interests if they are to receive any assistance in securing men. The system by which the men are compelled to board themselves and make their purchases from the company's store, he says, has to be abolished. It has frequently been found, the Minister claims, that at the end of the season the men are in debt to the particular company by which they were employed. The companies, he says, must board the men and pay them their wages at the end of the month.

"The suggestion has been made by influential lumbermen that alien internment camps should be released and put to work in the lumber camps. This will not be considered unless the lumbermen can show that they have done everything possible to secure labor at reasonable wages and have failed.

Successful Management of a Growing Business

Mr. F. E. Mutton, Toronto

Success in many lines of industry does not depend upon the amount of capital devoted to it, or the amount of money held in reserve; nor does it depend upon fine office buildings, extensive furnishings, etc. The basis of success, irrespective of everything else, is good management. The International Time Recording Company of Canada, Ltd., is a striking illustration of this fact. Mr. F. E. Mutton who accepted the managing directorship of this company last spring affords an example amply bearing out this statement. To a large extent, this company, in former times, was allowed to run itself. The product was satisfactory, but as Mr. Mutton says, "simply being satisfactory does not suffice. One may be content, but should never be satisfied."

Since last spring, when Mr. Mutton took charge, there has been a striking change in the time recording business in Canada. The books of the International Time Recording Company of Canada, Ltd., indicate that the smallest increase there has been in one month under the new management is 50 per cent. This is the result of improved product and proper training of the organization. The proper duties of a general manager, as Mr. Mutton sees it, are to give each man his part to do, and then to see that he does it. In other words, he plans the work, then works the plan.

In conversation with Mr. Mutton we asked him if he thought it paid to advertise. His apt reply was, "does it pay to talk at all about your product? If it does, then it pays to advertise. How are you going to sell any product if you do not talk about it?" The advantage of advertising, in his mind, is that you can talk to thousands of people, whereas by individual effort you can only talk to one man at a time. "You could not sell thorough-bred horses for $1 each," he said, "if you did not tell the people you had them."

Mr. Mutton is Canadian born, raised and educated in Toronto. In the business world he spent nineteen years with the National Cash Register Company, during fifteen of which he was Canadian manager. At the time of severing his connection with that company three years ago the Canadian Sales Organization had been leaders of the world's selling force for the previous four years, which was surely something worth while. As he puts it, he spent half his life educating the public how to take care of their cash, and if he spends the other half educating them how to take care of their time, he feels he has done his share.

Mr. Mutton has never spared any efforts which would help salesmen, no matter in what branch their occupation took them. He has addressed many conventions upon the subject of "Salesmanship," which apparently must have been effective, for he has many similar calls upon his time, which he has been obliged to decline, on account of the pressure of other affairs.

The business of the International Time Recording Company of Canada, Ltd., is growing so rapidly that the company are already arranging to make large extensions to the manufacturing end of the business. Their factory staff report that they cannot keep up with the selling force and Mr. Mutton says, "They never will." The product of this factory is the result of thirty years' experience in the study of the needs of the employer of labor.

A Valuable Veterinary Book Free

The attention of our readers is called to the advertisement of Fleming Bros., manufacturing chemists, of Toronto, who are offering to send free a copy of "Fleming's Vest Pocket Veterinary Adviser," which is of value to all lumbermen. The book contains 96 pages illustrated, and is durably bound in leatherette. It covers over two hundred veterinary subjects, describing diseases, so that different symptoms can be readily recognized, and the proper remedy selected. A post card will bring the book post paid to any address in Canada.

The 6th annual report of the Commission of Conservation has been published in book form and contains much interesting information regarding Canada's resources in forests, fields, mines and streams. In the conservation of forests, the report shows that steady progress has been made. Inventories of Canadian forests are being compiled, and much has been done during the past year to lessen the number of forest fires along railway lines. As a result, great forest areas have been saved from fire. This, and other phases of Canadian forestry, are considered in the report by such authorities as Dr. B. E. Fernow, Messrs. R. H. Campbell, H. R. MacMillan, G. C. Piche and A. D. MacTier. The report is well illustrated and has a carefully prepared index.

Union Lumber Co.
Limited

Dry Norway Lath

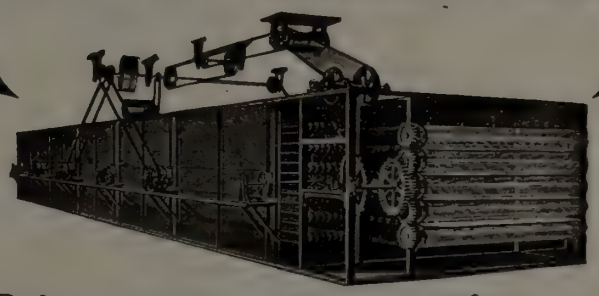
6/4 x 3/8 x 4' Mill Run 275,000
" " No. 3 450,000

Piled at Midland.

Can supply a few cars 4 x 5 Spruce 1915 cut.

Union Lumber Co., Limited
701 Dominion Bank Building
TORONTO, CANADA

PROCTOR VENEER DRYER



Dries enormous amount of veneer perfectly flat and pliable at minimum cost, without checks or splits
Send for catalog and list of users
The Philadelphia Textile Machinery Co., Philadelphia

"BARGAINS"
Dry Pine and Hardwood Lumber for Shell Boxes
Hemlock in all Sizes
Maple, Birch and Oak Flooring etc.
Everything in Lumber
John Harrison & Sons, Co., Ltd.
Owen Sound, Ont.

Review of Current Trade Conditions

Ontario

During the past fortnight we have received more encouraging reports from Ontario lumbermen than we had received previously for a much longer period of time. It seems to be a fairly general opinion that the lumber trade in Ontario is reviving. When this can be truthfully said to be the case, at such a time of year as the present, it is most encouraging. One of the largest manufacturing and wholesale firms in Ontario, discussing the apparent improvement, advised us that the actual volume of trade was showing an increase. This was, of course, not so much along the ordinary lines as along special lines such as the demand for shell box material. On the other hand, however, this firm reports that its enquiries have led it to conclude that the furniture manufacturing business is showing quite an improvement. Recently one of its representatives visited a number of furniture companies and was surprised to learn that in many cases these firms report a really wonderful improvement in business. Some of these firms had shell box contracts on hand, but they were commencing to feel independent of this line of business, because their ordinary lines were picking up so well. They were also coming to the conclusion that the improvement was likely to be permanent.

The building trade situation is not active, nor could one expect it to be so at this time of year. Nevertheless the trade in hemlock is rather promising. Reports which we have received indicate that the price of hemlock may advance in the course of the next few weeks. Pennsylvania, Michigan and Wisconsin manufacturers have already advanced their prices $1 per thousand feet. In Ontario the production of hemlock has been light for some time and retailers have allowed their stocks to decline. There is a fair amount of building in progress in the country districts. These circumstances combined have, in the past, almost invariably led to an advance in the price of hemlock. The improvement in the trade in the country districts, while not extensive is noticeable. At no time during the past few months has the country trade been so flat as the city trade. While the farmers have not been building extensively, they have found it necessary to invest a fair amount of money in buildings for taking care of their crops, stock, equipment, etc. One wholesaler with whom we recently had a discussion said that he had just secured an order for stock for the construction of six silos.

We have outlined above, the situation in connection with normal lines of trade. In the shell box situation the demand for spruce and birch continues very active. The probability is that it will increase greatly in the near future as the reorganization of the shell committee involves, according to official statements, orders for a great many more shells, and boxes will have to be produced for all of these.

A large manufacturing firm in Northwestern Ontario, whose markets are largely in prairie centres, report that improvement so far in their business is not very noticeable. They had hoped for a good improvement after the crop was harvested, but one or two weeks of wet weather delayed the harvest to such an extent that they do not now expect the improvement this fall. They, however, are looking for a fair spring business from the country points.

Eastern Canada

The lumber trade at Montreal continues quiet, but there is a little more optimism among the trade than there was during the summer. No extensive improvement is expected in the near future, but there is a fair amount of business in progress and it is expected that increased orders for shell boxes will shortly appear and make business a little better than it has been. Building permits are increasing slowly and presenting a little better situation in the building trade. The lack of tonnage for export to Great Britain continues to be the great drawback in the export trade. The rate for export is now about 200 shillings per standard. It is likely, however, that the heavy shipments of spruce and birch during the present year will more than offset the decrease in pine.

At St. John, N. B., the sawing season is nearly at an end. Some of the mills have been idle all summer and very few manufacturers have sold stock this year at anything substantial in the way of a profit. The only successful ones were those who sold their season's cut early in the year. The American market continues very quiet. During the last month, however, schedule stocks have been selling in the United States at $23 and $24. Even at these figures the operation is not very profitable because the boards and side stock will only bring about $18 or $19, and it is difficult to find buyers even at that. A few more buyers than usual have been coming from the United States recently, but they have not purchased much stock. The local situation shows no change. The logging outlook for the present winter is still uncertain, but will probably be definitely understood in the course of another three weeks. There is an excellent market for boxes, on account of extensive war orders.

There are not many changes in prices to report in connection with trade at Boston. Prominent wholesalers and manufacturers, however, advise us that the general feeling of the trade shows an upward tendency in prices. Red cedar shingles have advanced a little, to about $3.45 to $3.50 for 16 in. extra Vancouver shingles, and $3.25 to $3.30 for the Washington shingles. North Carolina pine, roofer grade, shows an advance of from 50c to $1 per thousand, and the No. 2 common grade in southern pine shows a similar increase in price. There is not any definite change to report in connection with white pine, but important manufacturers and wholesalers state that they are expecting some advances soon in the prices of the coarser grades.

United States

Lumber trade conditions in the United States continue to improve. The improvement has now been in progress for several weeks and has come to be looked upon as general and probably permanent. Ordinarily, at this time of year, a slight falling off is expected. Throughout September and October, however, the demand this year increased, particularly in the south, until stocks were pretty well broken, and the present outlook is that the year will end with less than normal stocks on hand to be carried over. This will make an excellent foundation for a firm market in the new year. Practically all the leading woods are sharing in the improvement. Building operations both in cities and in the country are well maintained, and the outlook is for continued building activity on a fairly large scale throughout November, and well into December, if the weather is favorable. Looking at conditions in general, it is reasonable now to expect that there will be a strong and general market for the beginning of 1916.

The most noticeable improvement is in southern yellow pine. It is many months since the manufacturers of yellow pine have been in so good a position to dominate the market as they are to-day. For many months, mill activity has been regulated very closely by stock sheets and order books. Very little transit business is in progress and bargain offers of lumber are very scarce. Few of the retail lumbermen have laid in extensive supplies. The present rate of production in southern pine is on a sound basis. A material increase, however, would bring about unsettled prices, and it is to be hoped that this will not be the case.

Reports from the Pacific coast are also encouraging. In the middle west the demand for fir is much better, especially since the yellow pine prices began to stiffen.

The hardwood market is in better condition than it was a month ago, throughout the north and south. Dry lumber is being absorbed more readily. Northern manufacturers, although they still have fairly large stocks are reporting better conditions. The outlook for hardwoods during 1916 is now thought to be better than it has been at any time during the past year and a half.

Extensive sales of northern pine are reported. Favorable building weather has resulted in retail yards replenishing their stocks, and there has been quite a volume of rush business as a result. Shipments continue to show an increase.

Great Britain

The timber trade situation in Great Britain shows every evidence of continuing to the end of the year along the lines which have been noticeable for some months past. These are chiefly characterized by gradually increasing prices which are following upon the continual advances in the cost of freight. Increased firmness in the cost of all Scandinavian woods is still reported, and the same conditions continue in connection with stocks from North America. Spruce shippers in the Maritime provinces have lately been asking higher c. i. f. prices, partly on account of the rise in freights and partly on account of the growing conviction that importers will eventually be compelled to buy further stocks at the prices asked. For some time past, spot values for spruce in Great Britain have scarcely corresponded with c. i. f. prices, and consequently, business has not been very active. Merchants, however, are now firm in their ideas and spot prices are steadily rising. Even yet, however, there is not much of a margin for the importer. The most important feature of the general timber trade in Great Britain, at many of the ports, is the large proportion of newly arrived wood which is going direct into

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

consumption. Apparently the inland merchants are experiencing a good demand. Much of this trade is in special sizes and quantities, of which the quantity available is nothing like adequate to the demand. There continues to be a remarkable absence of speculation in connection with practically the whole timber trade. A few importers however, have recently shown a slight tendency towards speculating on the winter demand.

In the spot market at London there has recently been a good deal of activity on the part of importers who are anxious to conclude their forward arrangements as speedily as possible, on account of the approaching close of the shipping season. The demand is active and large quantities of fresh arrivals are being taken overside. Values continue on the upward grade. At Foy, Morgan and Company's recent auction sale 3 x 9 third Quebec pine sold at £20 and £19 10s per standard.

The chief arrivals of soft woods at Liverpool recently have been pitch pine and Canadian pine. Cargoes of spruce have shown a falling off. The spot demand for hardwoods at Liverpool continues active. Trade at Manchester is still remarkably good, in spite of the fact that prices continue to stiffen. At Bristol the timber trade has plenty of orders on hand, but there is difficulty in getting the goods away, owing to railway congestion.

Glasgow trade continues fairly good, a steady movement into consumption being maintained. Recently the demand has been rather of a more general nature, and a fair business is reported in all branches of the trade. The demand for spruce is still active, and prices are again on the up grade. Several sales have recently been reported, from new arrivals, at much increased rates. Yellow pine deals have met with more request also. Birch logs are being well taken up from stock, at enhanced prices.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

St. John Season Nearing its Close

St. John, N. B., November 8th (Special to the Canada Lumberman):—The present season of sawing is fast drawing to a close. Only about two weeks of open weather can now be relied upon to operate the mills, after which it is very uncertain how much longer operations can be carried on. Many of the mills are now idle, having sawn out every log they had early in the season, and, in fact, some were closed all through the season. It does not look as if the mills will have a very successful year from the standpoint of profits, as prices have been at a standstill all summer. In fact, it has not been a matter of prices but a matter of finding a buyer of English deals at any prices which would leave a profit. This has been almost impossible, although parties who sold early in the year did well and were, in fact, the only lucky ones, providing they sold their season's cut ahead.

In the American market no sales at profitable prices have been made, as no market could be found for our provincial stock in that market. In fact, prices have been lower in the United States during this season than for years. As low as $21 has been the talk until the last month, when we have seen a rise to $23 and $24. But this is only for schedule stock and when one came to try and sell boards and side stock as scantling, not over $18 to $19 could be had and practically no buyers at that. Lately, a few American buyers have come on the market and taken up some stock, but in limited quantities.

Locally, everything remains the same, and will do so, for at least 10 days when steamers are expected to load deals and will no doubt move a considerable amount of stock. No movement of deals has taken place for at least a month and considerable stock is now piled at the mills. There is also no change to be reported so far as logging for next year is concerned, but is felt that in the next three weeks we shall see a decided change. The box business is good as many war orders are coming to hand.

Montreal Trade Continues Quiet

Montreal, November 10th (Special to the Canada Lumberman):—Except for a continued demand for lumber for shell boxes, trade is quiet, although, considering all the circumstances, conditions are by no means unsatisfactory. There is a general feeling that business will pick up, and while one cannot look for a pronounced revival during the next few months, there is sure to be a fair amount of business in the event of renewed large orders for shell boxes—and this would seem to be almost a certainty in view of the extensive orders for shells now being given out. Despite the advanced season, it is significant that the building permits for last month make a comparatively better showing than those for many previous periods. They totalled $493,268, a decrease of $209,642; while for the ten months the total was $5.005,526, a falling off of $11,907,075.

Lumber shipments to the United Kingdom are restricted, due to the want of tonnage, and also to the exceptionally high rates, which now stand at about 200s. per standard. At the beginning of the season it looked as if there would be a considerable decrease for the year. Since then the demand has grown, and although the exports of pine have fallen off, these will be more than counteracted by the heavy shipments of spruce and birch. The probability is therefore, that when the total for the season is made up, it will be found that Montreal is ahead of the previous season's exports.

Owing to the probable shortage of sulphite pulp, prices have advanced about $5 per ton. Canadian mills have commenced to ship unbleached sulphite to England, where the price is about $55 per ton. Germany is now using sulphite, instead of cotton, for explosives, and is paying very high prices for it. This will mean a restricted supply for the United States, which will have to come to Canada to make up the shortage; this country is fortunately in a position to produce a considerable portion of the deficiency. The chances are that the prices of nearly all papers in Canada and the United States will rise. Ground wood is quiet.

Parrsboro Shipments for October

Parrsboro, N. S., Nov. 5th (Special to the Canada Lumberman):—Shipments of deals and scantling from Parrsboro to the United Kingdom during October totalled 6,389,200 feet. These shipments were all carried in Norwegian and Danish bottoms, and do not include 115,000 feet of hardwood deals shipped via St. John. The Norwegian steamer Ydon, which sailed from Parrsboro a week ago, is reported to have been sunk in collision.

The exports to the United States during October included 431,827 feet of spruce boards, 372,000 laths, 478 maple logs and 50 pieces piling. Several cargoes of piling have been exported during the month from adjacent ports.

Freights still have an upward tendency, and it is reported that in one case 170 shillings per standard was offered. Some vessels have had a wonderfully profitable summer. One Parrsboro tern schooner has already taken three cargoes of deals to England this season.

Ship-building once more promises to be brisk on Parrsboro Shore. G. M. Cochrane has a large tern schooner well advanced, and is getting out the frames for two other vessels, one of which is to be a four-masted schooner, registering upward of 500 tons, to take the place of the L. C. Tower, which was torpedoed last summer when returning from her first voyage. Capt. T. K. Bentley is building a large tern schooner and will probably build others. According to present indications there will probably be a record output this season, but the prospects for next year are not so favorable.

Market in Great Britain for Wood Block Paving

As a supplement to the report (published in Weekly Bulletin No. 609 of the Department of Trade and Commerce), from the Special Trade Commissioner, Mr. H. R. MacMillan, dealing with the market in Great Britain for wood block paving, replies received from city engineers in Scotland, who were sent samples of Douglas fir creosoted blocks, may be of interest.

Mr. James Thompson, city engineer Dundee, writes: "I have examined the samples of creosoted Douglas fir paving blocks and am of opinion that these are quite suitable for street paving in Dundee. I should be glad if you can give me information as to the cost per thousand delivered at railway station or on quay, Dundee."

Mr. James Sim, city road surveyor, Edinburgh, advises: "I may say that this corporation have hitherto been using Australian hardwoods—Jarrah, Karri and Blackbutt—for street paving purposes. The usual size of block used is 3 in by 5 inch by 9 inch, or 3 inch by 5 inch by 8 inch, while your samples measure 4 inch by 4 inch by 7½ inch. I observe from your letter that the city of Westminster, London, has included these Douglas fir blocks in their specifications, and in the event of their importing the wood in any quantity, no

Shell Box Lumber

DRY BIRCH

WE have in stock approximately three (3) million feet of 4/4-8/4 and 12/4 Birch sawn during seasons of 1913-1914 and 1915. This is particularly suitable for manufacturing or Boxing purposes as it was sawn partially square and partially round or live edged.

We have extensive Kiln Drying, Resawing and Dressing Plants and can work to order.

DRY SPRUCE BOARDS

We carry the largest and best assorted stock in Canada.

Send us your inquiries.

John Fenderson & Co., Inc.

Sales Office:
Springfield, Mass.

Saw Mills, Storage Yards and Planing Mills:
SAYABEC, QUEBEC

doubt this corporation would be able to obtain a small quantity of the blocks for trial. Perhaps you will be good enough to advise me if the wood is brought into England, and also give me an idea of the cost of the blocks per 1,000."

The Glasgow city engineer made a personal inspection of these paving blocks, and stated that the same compared very favourably with those secured from other sources, but that the use of blocks has been discontinued in Glasgow because owing to the dampness of the climate, the heavy traffic and the method of shoeing horses the wear on the blocks was found to be too great.

Pit-Props and Mining Timber

Attention is called in the Weekly Bulletin of the Department of Trade and Commerce to an enquiry, No. 1160, referring to pit-props and mining timber. Owing to the prevailing high rates of ocean freight it is essential, the Bulletin says, that considerable charges for inland carriage should not be added thereto, increasing the price to an unreasonable extent. It would appear therefore, that persons offering pit-props from points far distant from Atlantic ports and therefore subject to heavy railway rates will be unable to compete successfully. Doubtless, persons offering pit-props from the Pacific coast will bear in mind the difference between the ocean freight rates from ports on that coast and from Atlantic ports. The enquiry referred to is as follows:—

1160. Pit-props.—A Yorkshire firm desires to get in touch with persons in Canada who are prepared to quote for supply of pit-timber. They would like, if possible, to have a price delivered c.i.f. Hull or Liverpool, the former preferred, but if sellers cannot do this then to quote the best way they can. The following are the different sizes of props used and the quantities named are what are used approximately for six months:—

Props	3 ft. 0 in. x 3 in.	tops, the approx.	quantity over	6 mos. being	26,000
"	3 ft. 3 in. x 3 in.	"	"	"	33,800
"	3 ft. 6 in. x 3½ in.	"	"	"	39,000
"	3 ft. 9 in. x 3½ in.	"	"	"	15,600
"	4 ft. 0 in. x 4 in.	"	"	"	15,000
"	4 ft. 6 in. x 4 in.	"	"	"	33,800
"	4 ft. 9 in. x 4½ in.	"	"	"	41,600
"	5 ft. 0 in. x 5 in.	"	"	"	104,000
"	5 ft. 6 in. x 5 in.	"	"	"	13,000
"	6 ft. 0. in. x 5 in.	"	"	"	4,000

They also use timber in 15/20 feet lengths about 6½ inches to 8½ inches diameter at the rate of about 20,800 cubic feet over six months.

North Shore Position in New Brunswick More Promising

Hon. John Morrisy, Minister of Public Works for New Brunswick, states that he expects the cut of lumber on the north shore of New Brunswick this winter to be about normal. Speaking of the Miramichi, he said: "I look for just as big a lumber cut this winter as ever, despite the protestations that are being made by some of the lumbermen, who say that there will be a substantial curtailment in the production. I know that the lumbermen on the Northern side of the river will operate as heavily as ever, but Sinclairs however, have arranged to cut more than last year. There will be more lumber taken off the Lynch lands than for some time, and things will look much brighter than some of the lumbermen are inclined to paint them at this time. Of course there is difficulty in getting lumber shipped now, but if the Premier is successful in his efforts to have the Admiralty provide transportation across the Atlantic for this lumber at reasonable charges, this difficulty will not be so great. . . But even if the lumber cannot be moved, manufactured spruce deals are just as good as dollars, and I am told when a year old they are worth fully as much more than their original price as would be necessary to pay insurance charges to carry them over. I think the whole business situation on the north shore looks particularly promising."

Wood Pulp Required in Italy

The Department of Trade and Commerce, Ottawa, is in receipt of a cable, forwarded by Mr. Harrison Watson, Trade Commissioner at London, from a firm in Milan, Italy, who wish to import large quantities of wood pulp and cellulose for paper works. If Canadian shippers interested wire Mr. Harrison Watson, stating merchant prices c.i.f. Genoa, he will repeat to Milan. Should exporters desire to communicate direct with the firm in question the name of the company may be obtained on application to the Department of Trade and Commerce, Ottawa. (Refer File No. A-1107.)

Mr. O. W. Madden of the James W. Sewall office, Old Town, Maine, returned recently from a three months trip in the Allegash watershed. Mr. Madden has thoroughly explored the timber on about 100,000 acres of land, doing this work for the Maine State Board of Assessors for the purpose of arriving at fair valuations for taxation purposes. Mr. Madden states that the coming year's logging operations on the Allegash and St. John Rivers will be light."

Future Opportunities for Trade with Belgium

The Weekly Bulletin of the Department of Trade and Commerce, Ottawa, reports that the Department is in receipt of a communication from a gentleman formerly carrying on a general import and export business in Antwerp, who wishes to secure the agency of Canadian firms with a view to supplying materials for the reconstruction of Belgium and the North of France after the war. It is stated that the house in question desires to be put in touch with reputable Canadian companies prepared to appoint an agent for the sale of their goods in France and Belgium on the cessation of hostilities. Even at the present time it is suggested that opportunities might be found for securing Canadian business connections with France or with French or Belgian colonies. The articles which he is interested in handling include wooden heels for shoes; matches and match splints; woodwool; woodpulp; lumber; roofing felt; printing paper for newspapers and wrapping paper. With regard to the last two items it is stated that quotations with samples and full details as to dimensions of rolls and freight rates will be appreciated. The name and address of the house making the inquiry may be obtained on application to the Department of Trade and Commerce, Ottawa. (Refer File No. A-583.)

Reduced Cut Expected in Albert County, N. B.

Reports from Albert County, N. B., say that lumbering operations, which were very heavy last year, will be materially curtailed during the coming season, on account of the high ocean freights, scarcity of available ships, and the fact that a very large amount of lumber is still unshipped and will be kept over until next season. Some firms are not intending to put any men in the woods at all. Other concerns have decided to get out a cut, though even in these instances the operations are likely to be carried on on a much smaller scale. Wages in the woods are from $5 to $10 a month less than last season.

Logging Operations Increasing in B. C.

A report from New Westminster, B. C., states that two prominent lumbermen of the district estimate the quantity of seasoned lumber in the yards of all the mills in the district at about 65,000,000 feet, as compared with a normal stock of 225,000,000 feet. Assuming that the present rate of shipping is maintained, practically all the mills in the district will have to open their plants to get their stocks up to normal in the early spring. This will mean the opening of logging camps by nearly all the companies, during the present winter. Many workmen, who took part in the harvesting operations on the prairies, are now returning to seek employment in the lumber camps, and it is expected that labor will be fairly plentiful this winter.

Saskatchewan Manufacturers Busy

An enormous demand for lumber is following the prosperity of the farmers this fall, says a Prince Albert, Sask., report, and the Prince Albert Lumber Company and other concerns of the kind have decided to put all the men they can get in the bush. It is estimated that at least three thousand men will be in the bush by Christmas. This is the greatest that has been displayed by the lumber companies for the past three years.

Prairie Markets Improving

Vice president George Bury of the Canadian Pacific Railway, while in Vancouver recently, stated that there was now a great opportunity for coast lumbermen, upon the prairies. There was a great need for granaries, and he believed that a large business could be built up, if buildings were sent east in sections. He states that in his belief, the total crop this year would be worth $300,000,000 .

Western Farmers Building More Freely

Hon. A. L. Sifton, Premier of Alberta, in a recent interview at Vancouver, B. C., said that he expected the farmers of Alberta would do a great deal of building this fall. Retail lumbermen in Alberta were very pleased with the situation. This would naturally mean a considerable increase in the demand for lumber from the mills in British Columbia.

A few of our specials in Lumbermen's and Railroad Contractors' Supplies.

Write for our Catalogue.

Cut No. 25

Jack Buck Indian Tans

THE Famous "Jack Buck" Indian Tan Moccasins, as cut No. 25. Made from the highest grade of Indian buckskin. This line is made with six and ten inch legs. Sizes 6 to 12.

Sporting Moccasins

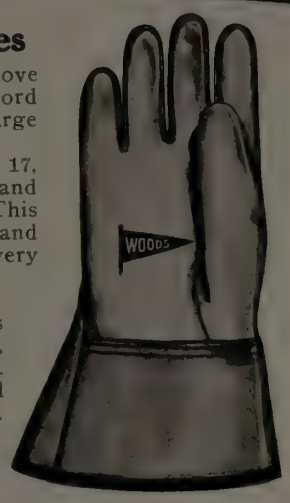
OUR Special, Sporting Drawstring Moccasins, as cut No. 26. "The Sportsman's Dry Foot Friend." We are pleased to recommend this line as the "Best ever," in our opinion, for the man who wants a dry foot. Sizes 6 to 11.

Cut No. 17

Mitts and Gloves

OUR Special Mule Glove as cut No. 17. Cord fastener. Extra large and full fitting sizes.
Same style as cut No. 17, but made from Heat and Wetproof Horsehide. This glove has both inside and outside sewn seams. A very serviceable glove.

Men's Gauntlet Gloves as cut No. 18. Muleskin, Calfskin and Horsehide. Full reinforced cuffs and all well sewn throughout. Sizes from 8½ to 10½.



Cut No 18

Sweaters

Cut No. 12

MEN'S Fine Wool Sweaters as cut No. 12. Shawl or military collar, also in vest effect. Plain or fancy assorted colors.

Cut No. 23

Smart-Woods LIMITED

"Everything In Canvas"

OTTAWA
TORONTO
MONTREAL
WINNIPEG

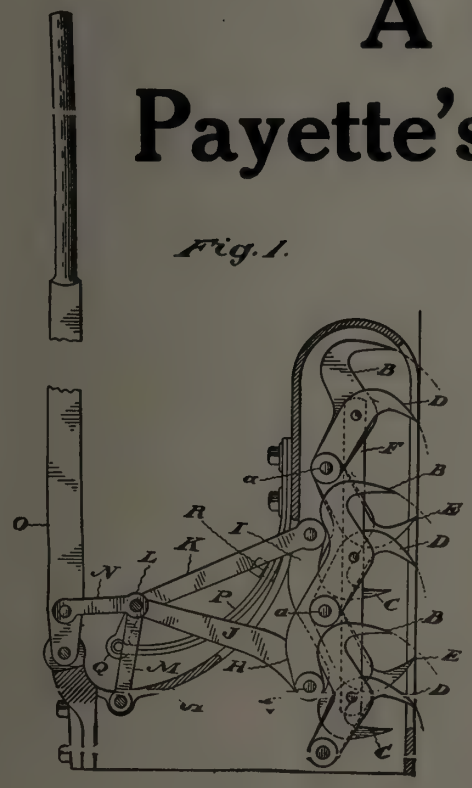
Write For Prices

A Boon to Lumbermen

Payette's Famous Patent Mill Dogs

650 Sets already sold

Fig. 1.



BECAUSE

(1) They will dog with perfect ease and safety in any class of timber.
(2) Will dog just as easily, frozen maple or hardwoods of any description.
(3) Will dog the last board, just as easily as they dogged the first one.
(4) They do not tear the board or stock.
(5) Many other reasons, too numerous to mention here.

Write us for full particulars and booklet on same.

We also manufacture the following High-Grade Saw-Mill Machinery;—New Modern Saw-Mill Carriages, with either three or two head blocks; P. Payette's New Patent Saw-Mill Dog, for use in either winter or summer. P. Payette's Grip-Set Works; Steam Feed Valves, Steam Lifter and Loaders, Valves. Five different classes and styles of Edgers, for either light or heavy duty. Combined Gang-Circulars and Edgers, or Independent Gang Circulars.

Steam-Canters, Steam Lifters and Loaders, and a general line of saw-mill machinery. Detachable Chain-Sprockets, Castings of Gray-Iron, Semi-Cast Steel, and brass castings for general use.
Descriptive Booklet and prices mailed free upon request.

P. Payette & Company

Engineers and Machinists

Penetanguishene, Ontario

The EAGLE LUMBER CO. Limited
WHOLESALE LUMBER
SANS-DIEU-RIEN
MONTREAL - Canada
Head Office at Montreal.

SPRUCE rough or dressed

1" No. 2 and Better Birch, 1914 cut
also Basswood, Hemlock and Pine

Saw Mills at MONT LAURIER.
Dressing Mills at ST. JEROME.

For Sale

Two Double Cylinder Hoisting Engines and Boilers, one with 7 x 12 and one 6½ x 8 Double Drum, with booms, cables and everything complete for loading logs. Used only two months, well kept and good as new.

Herman H. Hettler Lumber Co.
Midland, Ont.

Everything in Spruce

Dressed and in the Rough

Campbell, MacLaurin Lumber Co.
Limited
Board of Trade Building, MONTREAL

Dry Spruce and Birch

GOOD STOCKS PROMPT SHIPMENTS SATISFACTION

C. A. SPENCER, LIMITED
Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

Tht Foster mill, at Haileybury, Ont., has been purchased by the Riordon Pulp and Paper Company, who will make the necessary alterations for the handling of about 20,000 cords of pulpwood.

The Rat Portage Lumber Company closed its large mill at Kenora, Ont., on November 1st, after a very successful season's cut. The mill was operating throughout the season and during a portion of it, a night crew was employed. Operations this year commenced on April 19th, so that the mill had about six months and a half of cutting.

A party from Montreal, including several business men interested in the pulp and paper trades, recently visited the plant of the Abitibi Pulp and Paper Company, Iroquois Falls, Ont. The company will increase their output of newsprint to 180 tons per day, and soon to 230 tons. Six hundred men are employed in the woods and at the plant.

The Bushfield-Martin Lumber Company, with head office at Huntsville, Ont., has recently been formed. The members of the company are Mr. Geo. Bushfield and Mr. M. O. Martin, both of whom have been identified with the Muskoka Wood Mfg. Company, Huntsville, the former as chief travelling salesman, and the latter as accountant and secretary-treasurer.

An attempt was made on October 31st to set fire to the 4,000,000 feet of lumber remaining in the yard of Messrs. James Playfair and Company, Midland, Ont. Over 10,000,000 feet of lumber were destroyed in the fire of October 24th. Fortunately, the second fire was noticed when it was still only a small blaze, by some employees on a tug, and it was quickly extinguished. On examination, some waste saturated with oil was found, and several matches. In view of this occurrence it is considered that the disastrous fire of October 24th was also the work of some incendiary.

Eastern Canada

The Escourt Lumber Company, Quebec, P. Q., have been incorporated.

A. B. Comeau & Co., lumber dealers, Farnham, P. Q., have dissolved.

The Godbout Lumber Company, Quebec, P. Q., has been registered.

J. L. Brown & Company, lumber exporters, Montreal, P. Q., have been registered.

The paper mill of the MacLeod Pulp and Paper Company Ltd., at Milton, N. S., valued at about $250,000 was totally destroyed by fire on November 1st.

The Brooklyn Lumber Company, Hants County, N. S., completed its season's operations early this month, after having cut 7,000,000 feet during seven months.

Eben Lewis has started work upon the construction of a rotary sawmill at Salisbury, N. B. He is in the market for shingle mill machinery and part of the rotary equipment, also 200 feet of belting.

The Laurentide Company will receive 70 per cent. of the stock of a company, the Laurentide Power Company, Limited, formed to take over the new hydro-electric development at Grand'Mere, P. Q. The capital stock is $10,500,000, with a bond issue of $7,500,000. The Laurentide Company is now completing its new ground wood mill.

The large sawmill belonging to the Pejebscot Lumber Company, at Salmon River, N. B., was destroyed by fire recently. The loss is estimated at $50,000. It is not known how the fire originated. Near the mill were located the conveyor, a barge, extensive piles of lumber, and the buildings of the mill village, but all of these were saved. Information as to the amount of insurance is not yet available. The mill employed between 100 and 150 men.

A recent despatch from Fredericton, N. B., states that the formal transfer of the Timothy Lynch property on the Miramichi, to Fraser Ltd., Fredericton, took place on November 1st. About 9,000 acres of granted lands and licenses for 135 square miles of crown lands made up the timber lands in the transfer, while the mill site at Nelson and all the rest of the Lynch Company's business was also turned over, including about half a million feet of round logs which are being carried over. The report states that the price was $130,000. Fraser Ltd., will cut between six and eight million feet of lumber on the property this winter, and they plan to purchase some logs as well as stock for the new mill to be erected on the site of the previous Lynch mill at Nelson. The report also states that the new mill will probably manufacture about 10,000,000 feet of lumber in 1916. The plant will be similar in most respects to Fraser's mill at Cabano, P. Q., and will have a capacity of about 120,000 feet per day. The cost is expected to be between $80,000 and $100,000.

Western Canada

The Flagstone Lumber Company, Elko, B. C., recently completed their new mill, and expected to commence operations early this month.

The sash and door factory belonging to D. W. Abrahamson, Revelstoke, B. C., was totally destroyed by fire recently, the loss amounting to $20,000. with insurance of $10,000.

The North Pacific Lumber Company, North Burnaby, B. C., have resumed operations, having secured a share of the large orders recently sent from Great Britain by Mr. H. R. MacMillan.

The Qualicum Lumber Company Ltd., has been incorporated with head office at New Westminster, B. C., and capital stock of $25,000, to carry on business as timber merchants, sawmill proprietors, etc.

About 1,700,000 feet of dry lumber was burned recently in the yard of the Jewell Lumber Company at Hanbury, B. C. The loss was partially covered by insurance. The mill adjoining the yard was saved.

A shingle mill has been fitted up and will be operated by four H.ndoos, on the old Salmon River mill site, near Sperling, B. C. One of the men interested in the undertaking is D. Jahn, who is to be the manager. The firm is to be known as D. Jahn and Company.

Miller and Slater, who have been operating Cook's mill between Dennison and Mount Lehman, B. C., this year, are nearly through with their cut at that point. They have purchased a mill at Lombard, B. C., from Mr. Bloomfield and will soon begin operations at that point. Extensive improvements will be made to the plant so that the new comers will be able to handle large timbers.

United Kingdom Box Shook Market

H. R. MacMillan, of Victoria, Special Trade Commissioner investigating United Kingdom lumber markets for the Dominion of Canada, has recently written a report on the box shook market of the United Kingdom, in which he says:—

"The market is especially active at present for two reasons. The war demands have far exceeded expectations and are weekly increasing. The large manufacturers who use boxes for shipment of their products, such as soap, sugar, canned goods, when buying their year's supply of box timber about six months ago, underbought because of the then prevailing high prices and in the hope that prices would come down; though prices have increased these important purchasers are now in the market for greater supplies. The weekly consumption of box timber is now about 15,000 tons measurement.

"The f.o.b. price of Swedish box shooks has increased fifty per cent., the freight has increased from 27 shillings a standard to as high as 105 shillings—it is now 85 shillings. Boxes which usually cost 7 pence each here, now cost 10 pence each. Canadian freights have also increased, but for box grades of lumber Canadian f.o.b. prices have not advanced. Further, the market for shooks is very active, the purchasers who in the past have always specified Swedish whitewood or redwood are more willing to accept trial shipments of Canadian wood. Agents are receiving important inquiries for large quantities of shooks every week. Swedish mills are still increasing their prices and taking their time in making quotations. Agents here state that for these reasons the present is an excellent opportunity to introduce Canadian box shooks. The shooks received from Sweden at present, while sound, are very knotty, and are built up of narrow strips four inches to six inches wide; Canadian shooks once introduced should be superior in appearance and quality and secure a preference in the market.

"While it may be possible in a few cases to supply shooks direct from the mill in Canada to the large user, it will undoubtedly be found advisable and necessary in nearly all instances to deal with established shook agents in Great Britain. A list of these agents is on file at the Department of Trade and Commerce, Ottawa. (Refer File No. 1499). The most important fact for Canadian box manufacturers to bear in mind is that the agent in the United Kingdom will not entertain f.o.b. quotations. The quotations must be made c.i.f. the designated port in cents or pence per box. The specifications always state the dimensions, finish, printing, bundling, and details of shipment. These must be rigidly observed, and it should be especially noted that all dimensions for planed or unplaned goods refer to the finished dimensions and as the Swedish goods are well manufactured the shipments from Canada of poorly manufactured goods, or of shooks that do not come up to the sizes specified, will make it difficult to establish trade."

At a meeting of creditors of Napoleon Sarrasin & Son, Limited, sash and door manufacturers. Messrs. Vinet and Dufresne were appointed liquidators, and Messrs. Y. Lamarre, T. Prefontaine, F. Tremblay, S. Bock, and N. Sarrasin inspectors.

A report from Three Rivers states that the S. S. Benin has been loading lumber for South Africa at the St. Maurice Lumber Company's wharf. Log assorting in the St. Maurice River booms has been finished; there are still many logs to be sawn up, and the mills are very busy.

The party of Dominion Senators, members of parliament and newspaper men, who recently made the trip to the Pacific Coast over the new Canadian Northern Railroad route were entertained during their visit by the Canadian Western Lumber Company, Fraser Mills, B. C. They were shown through the great sawmill, and its operation was explained to them in detail.

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914-15 cut.

Merchantable 1 x 4 x 10/13
Merchantable 1 x 5 x 10/13
Merchantable 1 x 6 x 10/13
Merchantable 2 x 4 x 10/13
Merchantable 2 x 5 x 10/13
Merchantable 2 x 6 x 10/13
Merchantable 2 x 7 x 10/13
Merchantable 2 x 8 x 10/13
Merchantable 2 x 10 x 10/13

all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding.

Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60% 12 and 13 ft.

First Quality and Clear Spruce

1 x 4 in. up x 6/13—'15 cut.

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13 3 in. x 9 in. x 10/13

60% Sawn May and July, 1915.

200 M. ft. 50% Best End of S. C. Pine, 1 x 4/6 x 6/11
175 M. ft. M. C. Pine 1 x 4/7 x 12/13
350 " " " 1 x 4/7 x 14/16
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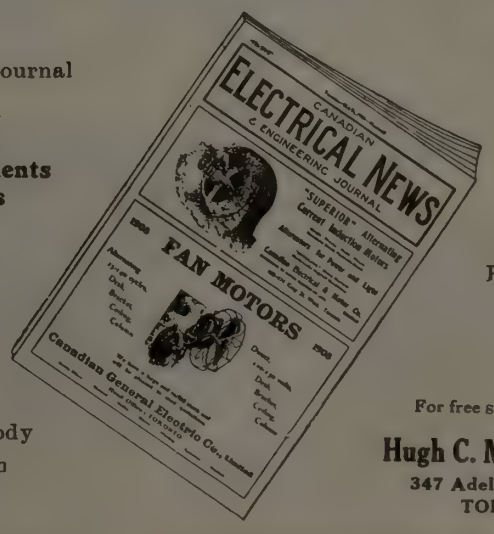

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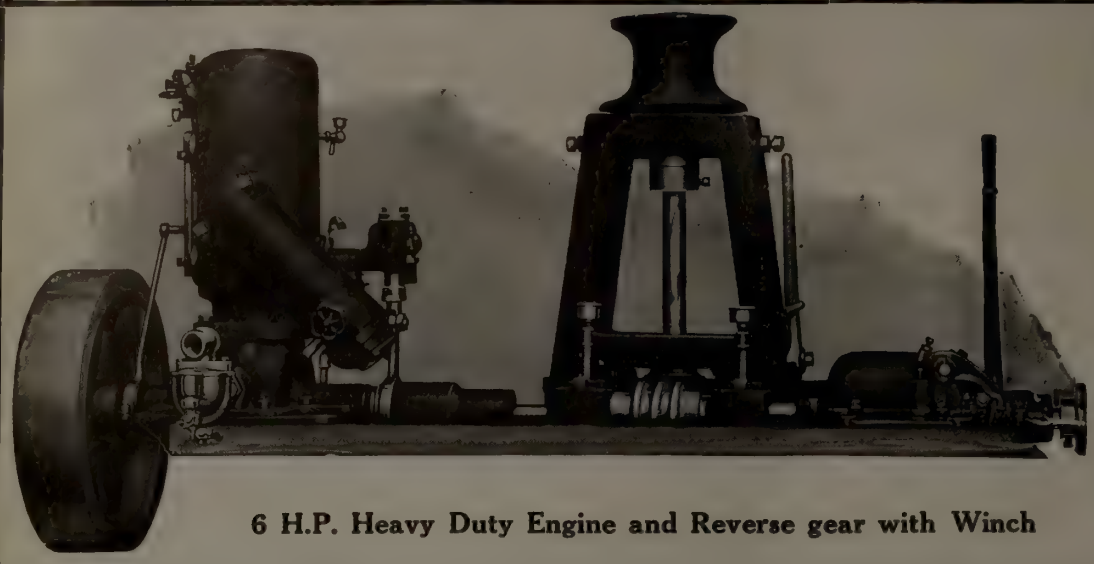

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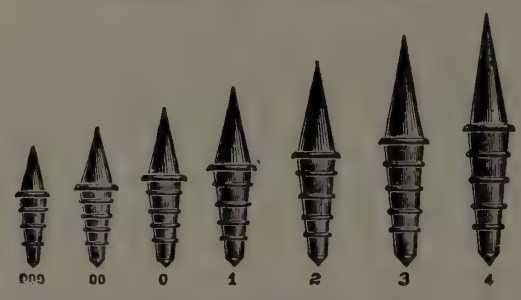

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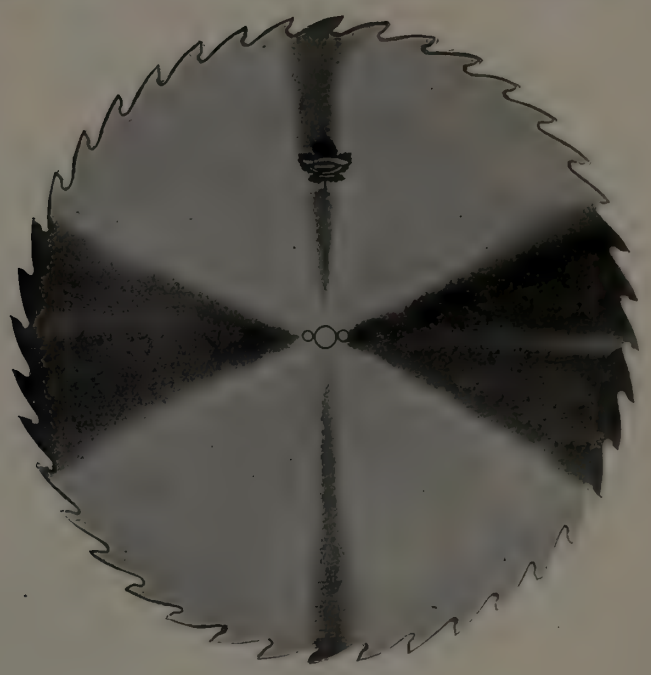

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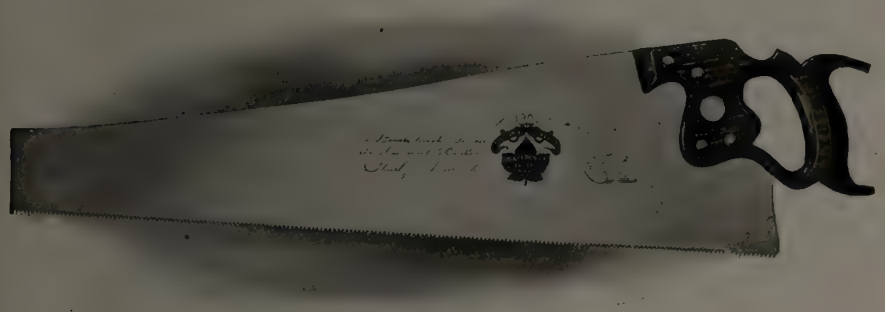

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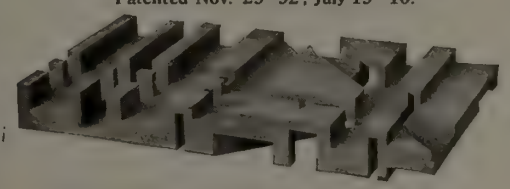

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TORONTO, ONT.

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1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better ..	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better ...	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing ..	27 00	29 00
1 x 8 common and dressing ..	27 00	29 00
1 x 10 common and dressing..	31 00	32 00
1 x 12 common and dressing..	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common.	25 00	26 00
1 x 12 inch box and common..		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00

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1 x 4 and 5-in. x 9 to 16 ft. ...	17 00
1 x 6-in. x 9 to 16 ft.	20 00
1 x 8-in. x 9 to 16 ft.	21 00
1 x 10 and 12 in. x 9 to 16 ft.	22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.	19 00
1-in. No. 2, 6-ft. to 16-ft. ...	16 00
2 x 4 to 12, 10 and 16 ft.	19 00
2 x 4 to 12-in., 12 and 14 ft. ...	19 00
2 x 4 to 12-in., 18 ft.	22 00
2 x 4 to 12-in., 20 ft.	24 00
2 x 4 to 12-in., 22 ft.	25 00
2 x 4 to 12-in., 24 ft.	26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.	16 00
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Dimension Timber up to 32 feet:

8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft.	31 50
6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft.	32 00
6x14, 8x14, 12x18, 18x20, up to 32 ft.	32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.	33 00
10x20, up to 32 ft.	33 50
6x18, 8x18, up to 32 ft.	34 00
6x20, 8x20, up to 32 ft.	35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

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XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

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Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4..	45 00
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Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4..	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
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Soft maple, com. and bet., 4/4	25 00
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White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
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Pine good sidings:

1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up ..	40 00	42 00

Pine good strips:

1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00

Pine good shorts:

1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No.. 1 dressing sidings ..	30 00	33 00
Pine, No. 1 dressing strips ..	29 00	30 00
Pine, No. 1 dressing shorts ..	22 00	24 00
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Pine, 1-in. x 5-in. s.c. strips ..	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips ..	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips ..	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft. ...	25 00	26 00
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Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in..	24 00	26 00
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O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16' ..	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

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White Pine		
First class Ottawa waney, 18-in. average, according to lineal..	60	65
Oak		
According to average and quality	60	70
Elm		
According to average and quality, 40 to 45 feet	70	75
According to average and quality, 30 to 35 feet	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
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Boards, 1 and 2 in.	16 00	18 00

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1 to 4 in.	16 00	18 00

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Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide..	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1-in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E.			
	6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft...	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed) ...	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft. ...	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft. ...	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft. ...	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft. ...	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft. ...	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page)

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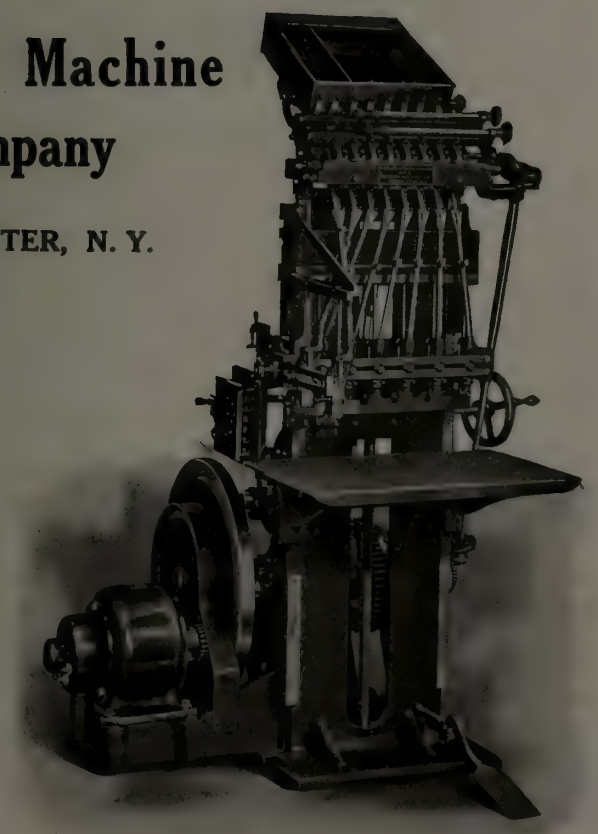

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Morgan Machine Company
ROCHESTER, N.Y.

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Ten Years from Now

Lumber may be the by-product of our forests. The economic changes in utilization developed by the meat packing industry will be paralleled with wood.

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GOOD BUSINESS is solving the problem of utilization.

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No. 1 Moulding 8/4	58	00
No. 2 Moulding 5/4	47	00
No. 2 Moulding 6/4	47	00
No. 2 Moulding 8/4	47	00
No. 1 Barn 1 x 12	48	00
No. 1 Barn 1 x 6 and 8	34	00
No. 1 Barn 1 x 10	36	00
No. 2 Barn 1 x 6 and 8	32	00
No. 2 Barn 1 x 10	34	00
No. 3 Barn 1 x 6 and 8	26	00
No. 3 Barn 1 x 10	27	00
Box 1 x 6 and up	23	00
Box 1 x 10	25	00
Box 1 x 12	26	00
Box 1 x 13 and up	30	00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.	55 00	
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.	40 00	
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00
All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1½-in. spruce laths	4 10	4 20
1½-in. spruce latns	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2 in.	3 45	3 50
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¼		4 80
Washington 16-in. 5 butts to 2-in. extra red clear	3 25	3 30

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Known in every Camp from the Atlantic to the Pacific as the most satisfactory Snow Plow made.

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When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.

E. I. Macintyre, 1413 Great Northern Bldg., CHICAGO.

A FLOOD SURVIVOR

Floods may come and floods may go, but Neptune Belting goes on for ever. Read what the owner of a large Saw Mill writes:

"We gave the 18-in. double leather Neptune waterproof belt that we purchased from you several years ago the most severe test that any belt could be given—the water was 8 feet deep in our mill, submerging the belt for ten days. I told our superintendent that we had better take the belt off before the water got to it, but he said that the belt was sold on a guarantee from the factory, and that we could try it out this time. When the water went down, all we had to do was to turn the hose on it to wash the mud and sand off it and start up. Now this belt is running our 8-foot Prescott band mill and is running just as good as when it was new."

Learn more about NEPTUNE Waterproof Leather Belting. Write for Neptune Book.

The Graton & Knight Mfg. Co.

Oak Leather Tanners and Belt Makers

Worcester, Mass., U.S.A.

Representatives in Canada:

The Canadian Fairbanks-Morse Co., Limited

St. John, Quebec, Montreal, Ottawa, Toronto, Hamilton, Vancouver, Victoria

Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

We make a Specialty of

Conveyor Chains

For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

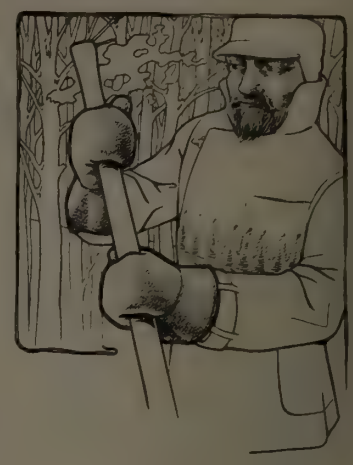
Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

The Seasoned Lumberman

demands a seasoned work-glove—one that will stand the gaff and protect his hands. He finds his ideal practically embodied in

ASBESTOL
REG. IN U.S. PAT. OFF.
EISENDRATH'S CELEBRATED HORSE HIDE



Heat, steam and water won't injure "Asbestol"—they are made strong in every part and will stand up no matter how rough or hard the work.

Dealers: Be sure you sell "Asbestol" gloves and mittens. They insure you a nice profit and will more than make good with your customers. Ask your wholesaler to supply you. He carries "Asbestol"—the one best bet in the work-glove line.

Eisendrath Glove Company

2001 Elston Ave. Made in U.S.A. CHICAGO, ILL.

Canadian Made Locomotives

There is no need to go outside of the Canadian market in order to obtain the best logging locomotives. We have been specializing in this line for fifty years. You will find the design of our locomotives complete and the sturdy construction equal to every test of the severe service of logging operations.

Repair parts can always be had on the shortest notice.

This engine is 13½ ins. x 18 ins. and weighs 35 tons.

Grey Iron Castings—any size or shape—ordinary or intricate—made promptly. New foundry, splendidly equipped We would be pleased to quote on castings—singly or by contract. We also make drop forgings of all descriptions.

MAY WE SEND YOU SPECIFICATIONS?

Canadian Locomotive Company, Limited, Kingston, Ont.

Taylor and Arnold Ltd., Sales Agent, Montreal and Winnipeg

J. J. TURNER & SONS

PETERBOROUGH, ONT.

Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

DETACHABLE

Lumber Trucks

For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East TORONTO

LOGGING LOCOMOTIVES

The designs of our Logging locomotives are the result of wide experience, extending over a period of 80 years.

The material used in their construction is thoroughly tested and is the best of its kind.

All details are accurately finished to standard gauges and are absolutely interchangeable on all locomotives of the same class and size.

This cuts out long delays at critical times of the work, as parts liable to wear can be kept on hand or shipped promptly from our works.

MONTREAL LOCOMOTIVE WORKS, LIMITED,

DOMINION EXPRESS BUILDING, MONTREAL, CANADA.

CLIMAX Improved Geared LOCOMOTIVES FOR WOOD AND IRON RAILS

A 62-ton Climax Locomotive Designed Especially for Heavy Logging Work.

Climax Locomotives are successfully operated on steep grades and sharp curves. Any weight or gauge. Locomotives in stock for immediate shipment. **Get Catalog "H."**

CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.
VANCOUVER MACHINERY DEPOT, LTD., VANCOUVER, B.C.

Do You Want a Salesman?

¶ Every live lumber salesman in Canada reads the Canada Lumberman and Woodworker.

¶ You can get the man you want through a small advertisement in the "Wanted and For Sale" department of this paper.

Canada Lumberman & Woodworker

Toronto, Ontario
Montreal Office, 119 Board of Trade Bldg.

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Boving Hydraulic & Engineering Co.
Perrin & Company, W. R.

PULLEYS & SHAFTING
Boving Hydraulic & Engineering Co.
Dodge Mfg. Company, Limited
Waterous Engine Works Company

PULP MILL MACHINERY
Boving Hydraulic & Engineering Co.

PUMPS
Smart-Turner Machine Company
Waterous Engine Works Company

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ROOFING
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

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SASH
Batts Limited
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Atkins & Company, E. C.
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Simonds Canada Saw Company

SAW SHARPENERS
Rogers & Company, Samuel C.

SAW MILL MACHINERY
Berlin Machine Works
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company

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Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SNOW PLOWS
Bateman-Wilkinson Company
Pink Company, Thos.

SOUTHERN PINE
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Cameron & Company
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Garrett Lumber Company, T. H.
Gates Lumber Company
Hobart & Company
Mason, Gordon & Company
Southern Lumber Company
Stout Lumber Company
Valley Lumber Company
Wilson Lumber Company
Wisconsin & Arkansas Lumber Co.
Wuichet, Louis

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Auger & Son
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Blair & Rolland
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Brown Corporation
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Christy-Moir Company
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Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL BARRELS
Smart-Turner Machine Co.

STEEL CHAIN
Canadian Link-Belt Company
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Standard Chain Company
Waterous Engine Works Co.

STEEL DRUMS
Smart-Turner Machine Co.

STOVES
Canada Stove & Furniture Company

STOKERS
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Fesserton Lumber Company
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Farnworth & Jardine
Lacey & Company, Jas. D.
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TIMBER ESTIMATORS
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
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TRANSMISSION MACHINERY
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TUGS
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VENEERS
Hoffman Brothers Company
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VENEER MACHINERY
Perrin, William R.
Philadelphia Textile Machinery Co.

VETERINARY REMEDIES
Fleming Bros.

WATER WHEELS
Boving Hydraulic & Engineering Co.

WOODWORKING MACHINERY
American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Long Manufacturing Company, E.
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

ATKINS Sterling SAWS

Do not confuse Atkins Band Saws with the ordinary Saw. Whether it's a Wide Band—a Band Re-Saw or a Narrow Band Saw—we promise a longer run with least refitting.

E. C. ATKINS & CO.

Makers of Sterling Saws

Factory—HAMILTON, Ont. *VANCOUVER BRANCH—109 Powell St.*

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

Tillson's Rolled Oats

Rainbow Flour—Top Patent Manitoba.

Goldie's Star—Famous Blended Flour.

Lily Flour—For Pies and Pastry.

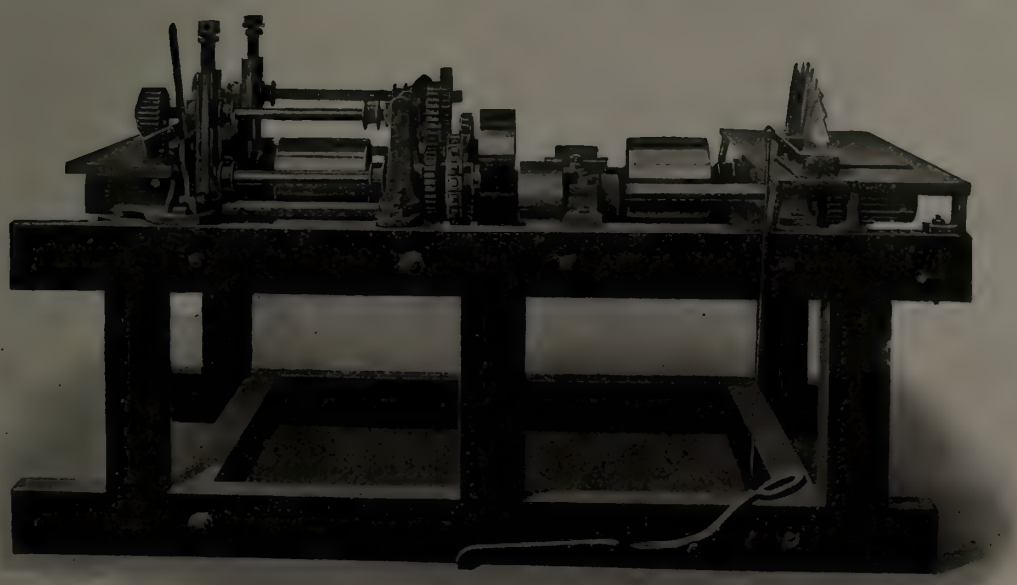
Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

GUARANTEED ABSOLUTELY PURE

Canadian Cereal and Flour Mills Co., Ltd.

TORONTO - - - - - CANADA

McLennan's Lath Mill and Bolter



THE capacity of this machine is 45,000. The other specifications are, lath machine pulley 7 inches diameter by 9 inches face, bolter pulley 18 inches diameter by 9 inches face. Floor space 7 feet 6 inches by 3 feet 6 inches.

This lath mill and bolter is substantially but inexpensively constructed and will manufacture into profitable material, lumber that might otherwise be unmerchantable.

We also make gang edgers, shingle machines, lath machines, bolters, sleeper machines and barkers, etc.

Write us for particulars.

McLennan Foundry & Machine Works Limited

CAMPBELLTON, N.B.

THE E. LONG MANUFACTURING CO.
SAW MILL MACHINERY
ORILLIA, CANADA

Vertical Steam Feed Valve

By reference to the cut, you will note that the valve stems are so connected to the bell cranks that one valve balances the other, therefore they are without friction and work very easily.

Being a vertical valve, the plug is virtually suspended in a film of oil, consequently, will remain steam tight for a long time. It is self draining, and being a vertical valve and connected as shown, when the sawyer's lever is plumb they are both on the centre, and therefore no amount of expansion will effect their proper working.

The exhaust, which is a mixture of steam and water, does not pass through the valve proper, but out underneath the plug, directly into the atmostphere, hence the valves do not stick or kick.

Should the connections break, the plug drops to position, completely closing the ports, thus making a safety valve as well as an operating valve. All valves are thoroughly tested under steam pressure before shipment.

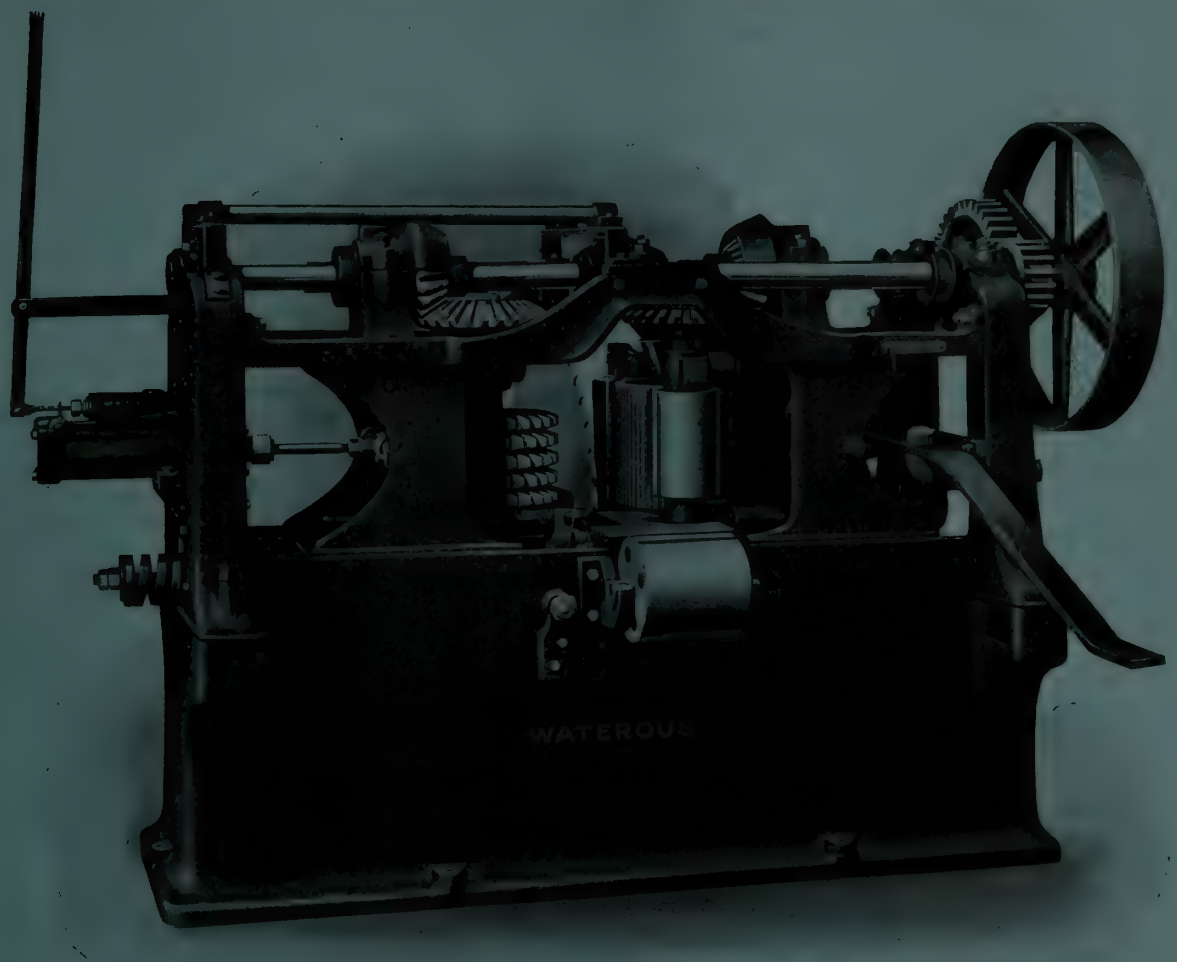
Have you our catalogue?

The E. Long Mfg. Co., Limited, Orillia, Ont.

Agencies:

Montreal - Williams & Wilson, Ltd.
Winnipeg - Stuart Machinery Co., Ltd.
Edmonton & Calgary - Gorman, Clancey & Grindley, Ltd.
Vancouver - Robert Hamilton & Co.

For Your Rough Slabs



THE WATEROUS CIRCULAR RE-SAW

The best machine built for getting good lumber out of rough knotty slabs.

It will stand more hard usage than the Band Resaw; it costs less to buy and costs less to keep going.

All the extra sawdust—that the bigger kerf produces—is taken out of *the slab portion.*

That's why, on slabs, this Waterous Re-saw is just as economical as the band resaw.

Heavy and substantial it carries a 42″ saw, is adjustable to cut from ½″ to 3″ inclusive. Has centralized control, is easy to operate, difficult to get it out of order.

We've sold a lot of them in Canada.

Bulletin No. 122, right off the press, is yours for the asking.

The Waterous Engine Works Co. Limited

BRANTFORD, CANADA

Branch—Winnipeg, Man. **Agency—H. B. Gilmour, Vancouver, B.C.**

Other Equipment

Bull Wheels
Steam Log Deck Equipment
Steam Feeds
Friction Feeds
Carriages, all sizes
Band Mills
Circular Saw Frames
Edgers, all kinds
Strip Machines
Waterous Gangs
Kendall Gangs
Lathmills and Bolters
Trimmers
Transmissions
Transfers
Filing Room Too s
Engines and Boilers

You'll find every machine used in producing lumber included in our list.

$5,000,000.00
worth of mixed metal sold annually.

"FROST KING" METAL

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. Price 30c per lb., Fort William and East; West of Fort William 35c per lb., delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, 40c per lb.; West of Fort William, 45c, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

Planing Mill Improvements

Every Manufacturer in the Lumber Industry realizes that to be "up-to-date" their Factory should be installed with **Shaving Exhaust Fans.**

The Sheldon Shaving Exhaust Fan

is especially designed to suit your particular requirements, giving greater efficiency and independence than any other on the market.

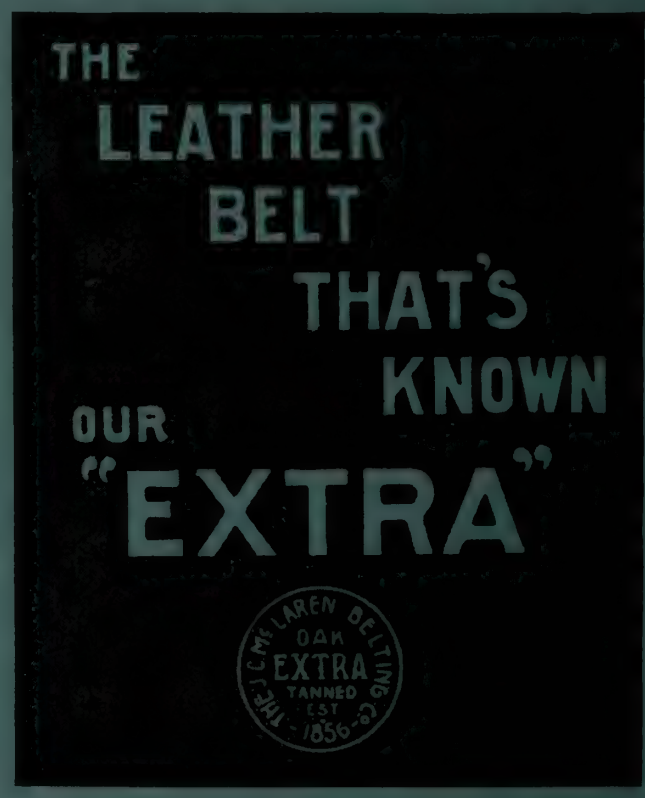
See our New Catalogue

Sheldons Limited - Galt, Ontario

Toronto Office, 609 Kent Building

AGENTS:

Messrs. Ross & Greig, 412 St. James St. Montreal, Que.
Messrs. Walker's Limited, 259-261 Stanley St. Winnipeg, Man.
Messrs. Gorman, Clancey & Grindley, Ltd., Calgary and Edmonton, Alta.
Messrs. Robt. Hamilton & Co. Ltd., Bank of Ottawa Bldg., Vancouver, B.C.

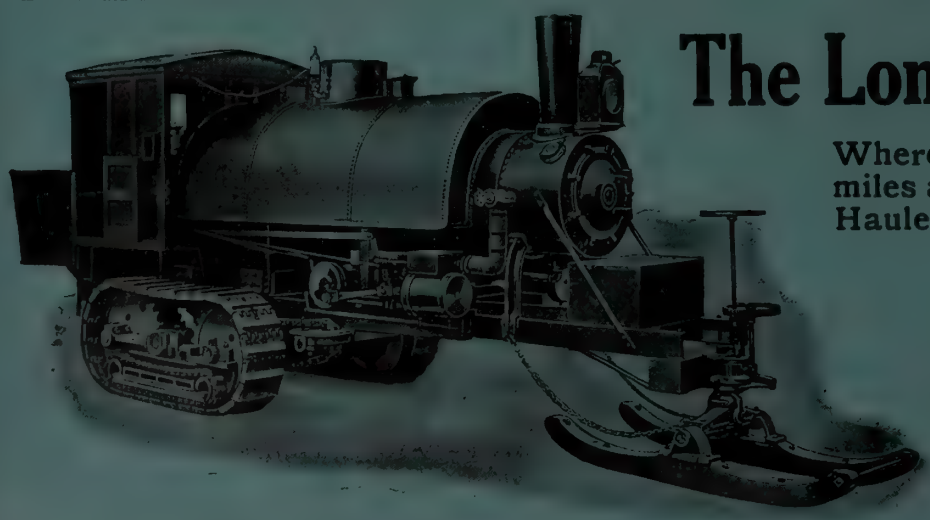


Montreal Toronto Winnipeg

The J. C. McLaren Belting Co.

Limited

General Mill Supplies MONTREAL



The Lombard Steam Log Hauler

Where the haul to the mill or stream exceeds five miles and the conditions favorable, the Steam Log Hauler will greatly reduce costs.

Write for full information

The Jenckes Machine Co.

SHERBROOKE, QUE. Limited

Montreal Office—E. T. Bank Building Vancouver Office—Exchange Building
Toronto Office—Traders Bank Building Ontario Factory at St. Catharines
Warehouses carrying stocks—Cobalt, South Porcupine and Vancouver

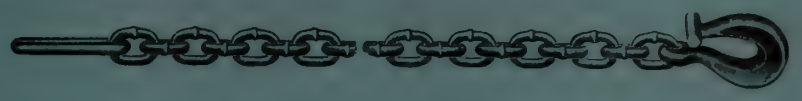
Vol. 35 Toronto, December 1, 1915 No. 23

Canada Lumberman & Wood Worker

WATER WHEELS GOVERNORS, PUMPS

Highest quality

Boving Hydraulic & Engineering Co.
LINDSAY, ONT. Limited



Made in all styles

Electric-Welded Boom Chain

We also specialize
Log Chains and "Dreadnaught" Loading Chain

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.

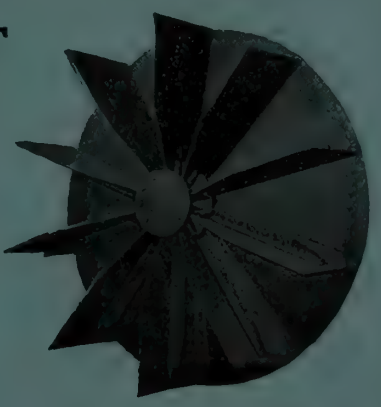
YOU CAN SAVE 15 to 50% POWER COST

in your exhaust systems for conveying and removing Shavings, Sawdust, Bark, etc., by using

Canadian Slow Speed Mill Exhausters

Facts are facts. Ask the users—and there are hundreds of them—what they think of the investment. Then you will use a "Canadian" on your next job.

Canadian Blower and Forge Co., Limited
BERLIN, ONTARIO
St John Montreal Toronto Winnipeg Vancouver



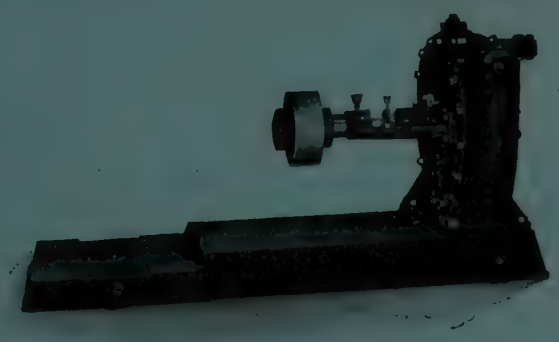
Blast Wheel for stringy material.

"TOWER" HAIR BELTING

Woven from Camel's Hair Yarn

Manufactured and guaranteed by

Turner Bros. Canada Limited
Montreal



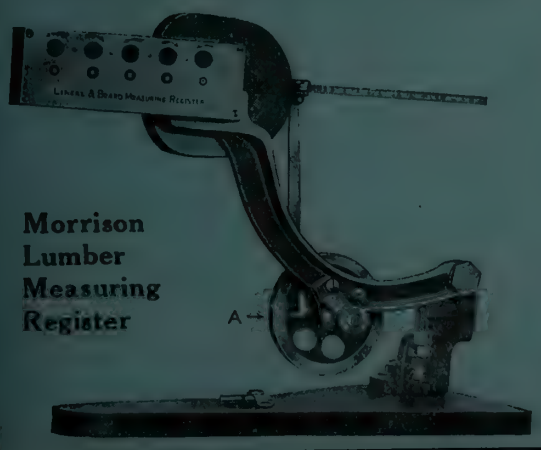
The Best Insurance

against expensive delays caused by breakdowns.

A Reliable Pump

as built by

The Smart-Turner Machine Co., Ltd., Hamilton Canada



Morrison Lumber Measuring Register

Measure Every Stick in the Order

Too much lumber in a definite order will hurt your profits while too little may damage your reputation. Equip your machines with Morrison Lumber Measuring Registers and have an accurate count, either in board or lineal feet, of every stick of lumber in every order you turn out.

Our literature will interest you.

The James Morrison Brass Mfg. Co., Ltd.
93-97 Adelaide Street West, TORONTO

Alphabetical Index of Advertisers, Page 52 Classified Directory to Advertisements, Page 60

A waterproofed leather belting made from the very best materials in the very best way—with a surface that "grips" the pulley.

"AMPHIBIA"

Ensure Efficiency

by using

A Good Belt on a Good Machine

If you are proud of the good machinery you possess, it is surely a pity—to say nothing of poor business—not to get the most out of it.

And you are not getting the most out of it unless you use "Amphibia" belting to drive it.

"Amphibia" has a surface and flexibility which make it the most efficient and "gripping" belt on the market.

By adopting "Amphibia" belting you ensure your machinery working at its maximum efficiency; you prevent the loss in transmission of valuable—and costly—power because you are using a medium of transmission which is perfectly designed for its task; you do away with the expense involved in the readjustment necessitated by the "stretching" of belts; you obviate the cost of renewals, because "Amphibia" is made from the best of butts procurable and is tanned in our own tanneries by a secret waterproof process which renders the leather impervious to oil, steam, water and fumes.

Your "economy" in buying a cheap and common belt to drive a costly and high-class machine is a false economy—and bad business. Try a sample run of "Amphibia" and prove it.

"Leather like gold has no substitute."

TORONTO
38 Wellington St. E.

Sadler & Haworth
Tanners and Manufacturers

VANCOUVER
107-111 Water St.

ST. JOHN
149 Prince William St.

For 39 Years Tanners and Manufacturers of the Best Leather Belts

WINNIPEG
Galt Building

MONTREAL, 511 William Street

Geo. Gordon & Co., Limited

Cache Bay, Ontario

Red and White PINE

Dressing done on short notice. ***Send us your inquiries.***

FOR SALE: Machinery and Timber

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the town of Parry Sound, Ont.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

All of the above open for inspection at Parry Sound.

The Parry Sound Lumber Co., Limited,

26 Ernest Ave.
Toronto, Can.

Mason, Gordon & Co. 80 St. Francois Xavier Street, Montreal, Que.

Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - Western Office:—Pacific Building, VANCOUVER, B. C.

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock—
heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont.

JOHN DONOGH & CO.

Wholesale Dealers
Are looking for buyers
—Special—
1 x 4 & 5 White Pine common and dressing 1913 cut

Dry Hemlock and Spruce all sizes

1205 TRADERS BANK BUILDING, TORONTO

P. & J. SHANNON

Lumber Manufacturers
BISCOTASING, ONT.

Dry Cull Lumber

at very attractive prices

SHELL BOX STOCK

3 cars 3 in. No. 1 Com. & B. Maple.
1 car 1 x 9 and wider No. 2 C. & B. Birch.
2 cars 1 x 9 and wider No. 1 Com. & B. Maple.
1 car 6/4 x 9 and wider No. 1 Com. & B. Maple.
2 cars 4 x 5 Merchantable Spruce.
2 cars 1 x 10 Merchantable Spruce.

ARTHUR N. DUDLEY
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Established 1873

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Limited

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RED PINE **SPRUCE**

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Bone Dry 1913 Cut

23,000	1 x 4 and up — 6/16 ft.	No. 1 Hemlock Sidings.
20,000	1 x 4 and up — 6/16 ft.	No. 2 Hemlock Sidings.
30,000	2 x 6 — 8/16 ft.	No. 1 and 2 Hemlock.
18,000	2 x 8 — 8/16 ft.	No. 1 and 2 Hemlock.
12,000	2 x 10 — 8/16 ft.	No. 1 and 2 Hemlock.
30,000	1 x 13 and up	Box and Better Pine.
30,000	1 x 4 and up	No. 3 Common Birch.
18,000	1 x 6 and up	1st and 2nds.
9,000	5/4	Good Birch Shorts.
30,000	1 x 4 and up	No. 2 and 3 Common Maple.

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Buy Hocken's Hemlock

and you will get a square deal —good stock and a prompt shipment—write us.

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As All Other Concerns Combined

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Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

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Hibernia Building **New Orleans, La.**

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This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

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Some of our stock on hand unsold. November 15, 1915

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	Feet
1 x 4 and up x 10-16	7,224

NORWAY MILL RUN

1 x 4/5 x 10-16	1,503,152
1 x 6 x 10-16	441,853
1 x 7 x 10-16	102,192
1 x 8 x 10-16	43,038
1 x 10 x 10-16	30,000
1¼ x 4 x 10-16	30,292
1¼ x 5 x 10-16	11,798
1¼ x 6 x 10-16	21,375
1¼ x 7 x 10-16	30,521
2 x 4 x 10-16	97,574
2 x 6 x 10-16	127,355
2 x 8 x 10-16	89,037
2 x 10 x 10-16	66,000
3 x 4 and up x 10-16	192,049
4 x 5 x 10-16	6,179

NORWAY CULLS

1 x 4 and up x 6-16 No. 1 and 2	386,684
1 x 4 and up x 6-16 No. 1	391,663
1 x 4 and up x 6-16 No. 2	371,618
1¼ x 4 and up x 6-16 No. 1	40,392
2 x 4 and up x 6-16 No. 1	18,017
3 x 4 and up x 6-16 No. 1	241,945

WHITE PINE GOOD

1 x 4 and up x 6-16	11,948

WHITE PINE MILL RUN

1 x 4/5 x 10-16	128,034
1 x 6 x 10-16	138,190
1 x 7 x 10-16	173,085
1 x 8 x 10-16	49,069
1 x 10 x 10-16	2,607
1 x 12 x 10-16	180,192
1 x 13 and up x 10-16	33,176
1¼ x 4 and up x 10-16	117,182
1½ x 4 and up x 10-16	200,000
2 x 4 and up x 10-16	90,211
2 x 6 and up x 10-16	14,290
2 x 8 and up x 10-16	76,913
2 x 12 and up x 10-16	94,831
3 x 4 and up x 10-16	124,340

WHITE PINE COM. & DRESSING

1½ x 6 x 10-16	101,200
1½ x 7 and up x 10-16	89,312
1½ x 12 x 10-16	63,219
2 x 6 x 10-16	87,988
2 x 8 x 10-16	133,918
2 x 10 x 10-16	150,190
2 x 12 x 10-16	183,290

WHITE PINE CULLS

1 x 4 and up x 6-16 No. 2	124,826
3 x 4 and up x 6-16 No. 1	69,397

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5/8 x 4 and up x 8/16	98,000
1 x 4 x 10-16	199,197
1 x 5 x 10-16	354,226
1 x 6 x 10-16	387,930
1 x 7 x 8/16	12,900
2 x 4 x 8/16 Full Thickness	800,000
2 x 5 x 8/16 "	908,900
2 x 6 x 8/16 "	299,000
2 x 7 x 8/16 "	124,700
2 x 8 x 8/16 "	89,000
2 x 9 x 8/16 "	26,000
2 x 5/10 x 8/16 D1S	81,000
2½ x 9 x 8/16	55,200

SPRUCE CULLS

3 x 4 and up x 6-16	260,000

MILL RUN LATH

1½—32-in. White Pine	187,350
1½—32-in. Norway	645,800
1½ — 4 ft. Spruce	4,800,000

CULL LATH

1½ — 4 ft. Spruce	400,000

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Extras	4264M
Clears	3144M
2nd Clears	3955M
Clear White	685M

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The Forest Reserve Pulp & Paper Co., Ltd.	Gaspe, Que.
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Beech
All Thicknesses

Also full line in

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Jack Pine

All grades and sizes.

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Pine and Hardwood
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Yellow Pine Timber a Specialty.
Interior Trim Mill Work.
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Square Spruce, Hemlock and Cedar Timber, Railway Ties, Telegraph Poles, Etc.
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All in Shipping Condition

35,000 ft. 1" No. 1 Com. and Btr. Black Ash
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AT RENFREW

65,000 ft. 1 x 8¼" and up No. 1 and 2 Com. Birch or will ship 9" and up.
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Following offered in block:
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Wide average and well manufactured.

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Mills: Byng Inlet, Ont.

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All stock sized or matched if required.

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Age will not dim the waxed, varnished or enameled surface when the wood underneath is Arkansas Soft Pine.

The fibre and texture of this material are such that a well-balanced absorption of the filler and pigment takes place at the time of application, and produces a perfect chemical adherence to the wood.

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Little Rock, Arkansas

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but be sure
to get Beck's boards
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and be prepared for your customers.

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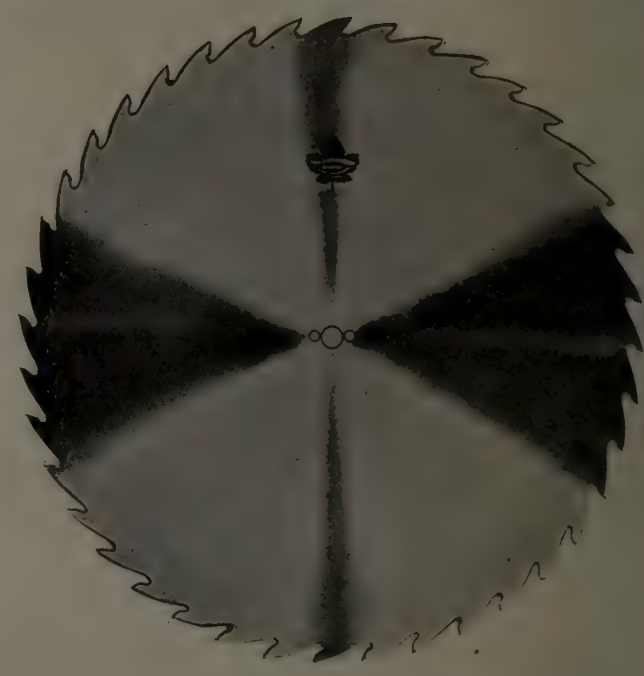

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Real Estate Trust Bldg., Philadelphia, Pa.

Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

Railway ties, nine feet long, 1¾ cents each.

Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

Timber Permits

Yearly permits are granted to settlers, mine operators and others on application to the Dominion Timber Agents, from whom further information can be obtained.

W. W. Cory,

Department of the Interior, Ottawa,
December 20th, 1912.

Deputy Minister.

THE BUILDER'S EMERGENCY IS YOUR OPPORTUNITY, IF YOU USE

Packard

NEW TYPE CHAINLESS TRUCKS

Most new homes are built in the outskirts, in the suburbs or the country, usually at a considerable distance from the source of supply. A shortage of materials is a serious thing to the builder—it means an idle building crew.

The lumber dealer who can meet his customer's emergency with a prompt and certain delivery is providing the kind of service that encourages repeat orders, the type of cooperation that brings new business while holding the old.

Packard New Type Chainless Trucks embody in one design all the principles of dependable and economical transportation developed in ten years' study of actual service conditions.

They are swift and sure, and their endurance and utility have been tested in 204 lines of trade.

They are built in seven sizes, of 1, 1½, 2, 3, 4, 5 and 6 tons' capacity, respectively. You can pick the truck for your task from the only complete line of silent, chainless motor trucks in the world.

There are optional speeds and frame-lengths in all sizes, to suit the work for which they are chosen, and any type of body may be fitted to any chassis. Delays in loading or unloading lumber are eliminated by the use of roller bodies.

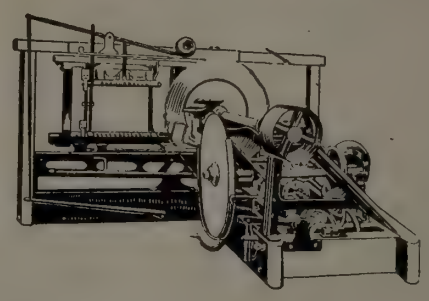
In the lumber camps or in city streets, Packard trucks are most serviceable, because of their reserve power, ease of control, and simplicity of design.

Packard standards of material and construction include a margin of strength far beyond the requirements of normal usage, and the mechanical excellence of Packard trucks is supported at all times by the Packard service organization, available in all parts of America. Send to Department 13 for catalog.

THE ONTARIO MOTOR CAR COMPANY, Limited
18 Bloor St. East, Toronto, Ont.—41 Queen St., Ottawa, Ont.

Ask the man who owns one

"Dunbar" Shingle Machine



The "Dunbar" Shingle Machine works smoothly and swiftly, producing shingles of uniform cut at a low cost.
Users of the "Dunbar" Shingle Machine testify to its strength and reliability.
Specifications are 2 38 Shingle Saws and 1 36-in. Jointer Saw. Speed, 1,600 r.p.m. Capacity 16,000 to 30,000. Weight 2,800 lbs. Main Arbor, 2 7-16 in. Poilshed Steel. Adjustable ratchets. Boxes Ring-oiling.
The "Dunbar" Shingle Machine is made in two models, "A," having Jointer Saw driven from counter shaft or line shaft, and "B," having Jointer Saw driven by a leatherboard friction, which makes it self-contained.
Write us in regard to your Shingle Mill requirements.
We also make Sappers, Cedar Cut Offs, Lath Machines, Car Wheels, and Castings of all kinds.
We will gladly supply you with information and prices.

The Smith Foundry Co. Limited
Fredericton, N.B.

Served by a Sturtevant Fan. Note Fan in Great Southern Lumber Co., Neenah, Wis.

Planing Mill Fans for Every Material

Whether you want to handle long shavings, short shavings, sawdust or refuse of any kind

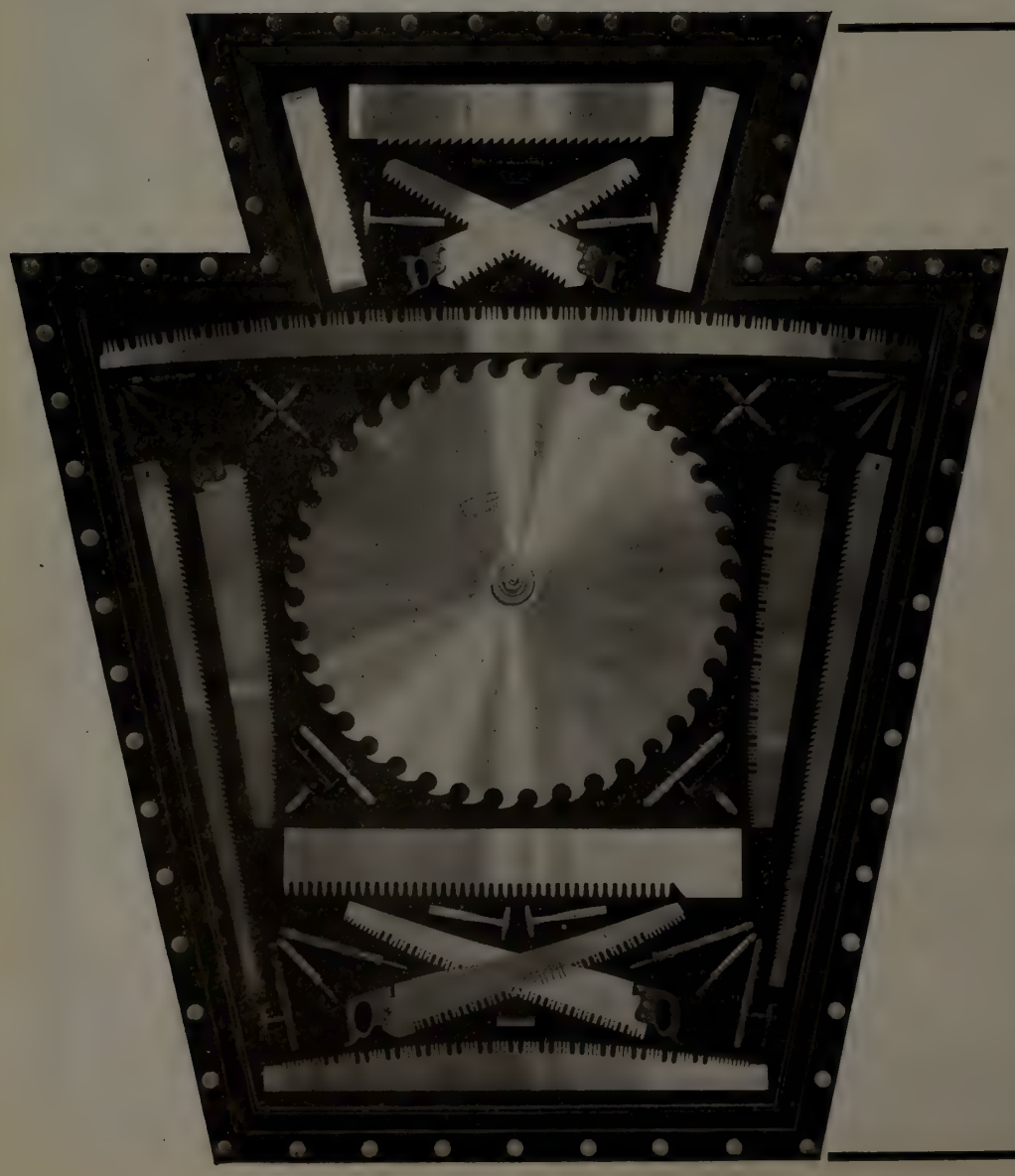
Sturtevant

Planing Mill Exhausters

will do it successfully. We make Exhausters with five different designs of wheels, each one suited to a particular work. No matter what conditions confront you we can suggest the equipment to satisfactorily meet them.

Ask for Catalog 155-C.

B. F. Sturtevant Co. of Canada, Limited
GALT, ONTARIO
Montreal Toronto Winnipeg Vancouver



Keystone No. 4

DISSTON Exhibit

Panama Pacific International Exposition

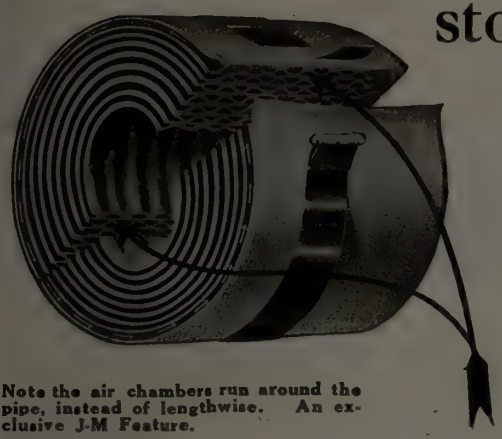
Highest Award

Saws, Tools, Files

Henry Disston & Sons, Limited
2 Fraser Ave.
Toronto, Ont., Can.

J-M Products are not only the result of experience and expert workmanship on materials of the highest grade, but have behind them the backing of J-M Service and Responsibility. They must give absolute satisfaction in service.

Get your share of the Winter's heating business by stocking J-M Asbestocel Pipe Covering



Note the air chambers run around the pipe, instead of lengthwise. An exclusive J-M Feature.

Are you ready to sell J-M ASBESTOCEL PIPE COVERING? Better look over your stock now. With the coming of winter every heating plant in your town will be overhauled.

Doubtless you are familiar with the sales arguments for J-M ASBESTOCEL—it's the pipe covering built on the arch principle with the air channels running around the pipe instead of parallel to it. The air rings thus formed have highest heat insulating efficiency because the enclosed air is "dead"—not in motion as in the lengthwise channels. This is a sectional covering, too. It doesn't crumble or break either in shipping or on the shelf. It is a clear stock to handle—any way you look at it.

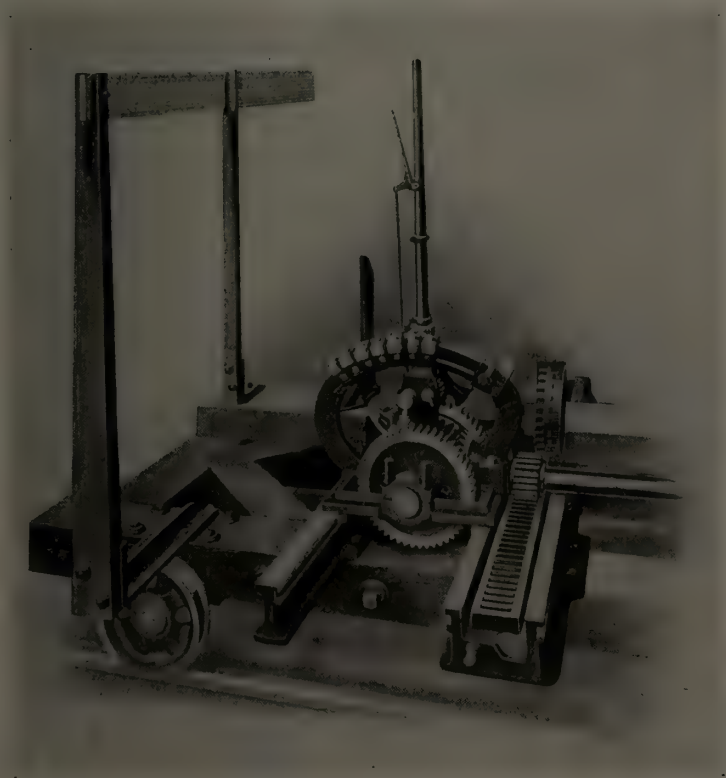
Write for information about prices, terms, dealer-helps, etc.

The Canadian
H. W. Johns-Manville Co., Limited

Toronto Montreal Winnipeg Vancouver

454

"Lane" Double Acting Setting Device



When the average daily cut of the mill is expected to exceed 18,000 or 20,000 feet, we advise our customers to have their mills equipped with the accompanying pattern of setting device. This setting device has many advantages for rapid sawing.

The Lane Patent Double-Acting Back Lever Setting Device as illustrated is very simple. The device will set for any thickness up to 2 inches, by a single throw of the lever, either forward to the latch, or back to the "home-rest" and up to 4 inches by a double throw, that is forward to the latch and back to the "home-rest."

We will be pleased to send you detailed information of this setting device. Write us.

Lloyd Mfg. Co., Limited, Kentville, N. S.

Days of Strenuous Competition in Lumber

The kind of days that demand two things of the Saw Mill operator; that costs be kept down and that production, quality and quantity, be kept up. Those two things were never accomplished by the use of cheap saws. Time and Labor are big factors. Simonds Saws are the greatest conservers of these two forces that there ever were in the line of Saws. Insist that Simonds Saws be operated in your mill; Bands, Circulars, Resaws, Gangs, Edgers, Slashers, Shingle Saws, also Planer Knives, Regular and High Speed Steel. Write for catalog.

SIMONDS CANADA SAW COMPANY, LIMITED

VANCOUVER, B. C. **MONTREAL, QUE.** **ST. JOHN, N. B**

What Do You Need for the Camp?

WHEN making up your list of requirements for camp provisions don't fail to write or wire us (at our expense) for special prices on the following or any other lines. Lowest market prices given for best quality goods.

Barrelled Pork	Sausage	Mixed Pickles
Dressed Meats	Bologna	Sweet Mixed Pickles
Smoked and Cured Meats	Pure Lard	Mustard Pickles
Long Clear Bacon	Peerless Shortening	Mince Meat

PEERLESS SHORTENING

is unequalled for use in camp. Cooks get the best results from this shortening and appreciate its firm, smooth texture. Costs about 2½c. a pound less than pure lard. We also supply TOMATO CATSUP in bulk especially for lumbermen's requirements.

THE WILLIAM DAVIES COMPANY LIMITED

MONTREAL TORONTO WINNIPEG

Canada Lumberman & Wood Worker

Issued on the 1st and 15th of every month by

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"The Canada Lumberman and Woodworker" is published in the interest of, and reaches regularly, persons engaged in the lumber, woodworking and allied industries in every part of Canada. It aims at giving full and timely information on all subjects touching these interests, and invites free discussion by its readers.

Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

Authorized by the Postmaster General for Canada, for transmission as second class matter.

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Vol. 35 Toronto, December 1, 1915 No. 23

Readers of this paper cannot fail to deplore the degrading facts that have been brought to light recently about the greed and selfishness of some of our fellow citizens who are sucking the country's life blood and growing wealthy at a time when sacrifice and service should be the public and private ideal.

Shell Box Contracts Need Probing

In the statements which have been made public by the Shell Committee in reply to our criticism of the manner in which shell box contracts have been let, a great deal of stress has been laid upon the claim that the contracts were being distributed as widely as possible and that the small planing mills were being given a chance. The complaints, according to the Shell Committee, were coming from those big concerns that wanted to "hog" the orders and not give the smaller mills a look in. The facts that we have collected about the mateer show that this is not so. If the small planing mills were being given a chance and were all being treated alike there would have been little or no criticism. The trouble is that many of the small firms that have tried to get some of this business have not been successful; some times not even getting a reply to their enquiries; while big concerns, of which we have already mentioned a few in previous articles, have been getting a substantial slice of the business although they are not in all cases entitled to it from a business point of view. That we have good reason for saying this will be clearly shown by a few of the things that have been said to us both in conversation and correspondence. To make the thing plain we will refer to some of them:—

"We have applied, by letter and personally, several times for permission to quote prices on shell boxes, but we have never succeeded in getting a chance to do this."

"We regret very much that up to date we have not been able to obtain any orders for shell boxes, although we have sought them with fasting and prayer at Ottawa on two occasions."

"We want to commend your article regarding orders for shell boxes. We are in the same position as those you have mentioned, in that we have a box department and could have handled some orders for boxes. However, all the efforts we could make, including a special trip to Ottawa, have been unavailing." On the contrary, this firm states that another firm in its town, not manufacturers of boxes, have been able to secure an order.

"We have tried to get shell boxes to make, but so far have not got an order. We do not know why, so all we can do is think."

"Our representative in the Dominion House was asked if there was any probability of securing a portion of this business for us. He said that he was going to Ottawa and would ascertain how matters stood when there. This was about six months ago. He was unable at that time to obtain any of the business for this town."

"According to what we have heard at Ottawa—but which we have no further means of substantiating, other than the statements of interested parties themselves—it takes some genius to get a box order, but it can be done. We are trying to prove that we have the genius, but up to date our success is problematical."

"We have written three times to the Shell Committee soliciting orders, but we have never waited on them personally or brought other influence to bear upon the Committee. We have been told that a good many who have received contracts have made personal application and have enlisted the help of the member for their constituency. This kind of means, of course, we have never resorted to, which probably accounts for our non-success in the matter."

"Up to the present time we have not been able to secure an order, although we have spent considerable time and money trying to get one. We have however, been getting out the different parts of shell boxes for quite a number of different concerns in Ontario, and some of the concerns we have been getting the parts out for, are very good customers of ours. At the same time what excuse the Shell Committee can offer for giving them contracts is beyond our conception. However, the question is rather a deep one, but notwithstanding the fact that we have spent considerable time and money trying to fathom it, we are not any farther ahead than when we started. In fact, the Shell Committee refused to answer our letters."

These letters are samples, they show definitely how the situation is viewed by the trade. Many of them are "little fellows"; the very class that the Committee would have us believe that they are trying to help by distributing the orders widely. This excuse is nonsense. Some of the firms we have previously mentioned are by no means small ones, the Deakin Construction Company and the Cedars Construction Company for instance.

As to the Cedars Construction Company General Bertram has stated that he has nothing to show that this was not a bona-fide box manufacturing company and the orders were given in good faith. Surely General Bertram should have found out about this company before giving it a contract. He could easily have learned that the work was being done at 137 Ann Street, Montreal, owned by the Montreal Light, Heat and Power Company; that a member of the Montreal Light, Heat and Power Company's staff is the chief man in the Cedars Construction Company and that anyone who wants to do business with the Cedars Construction Company is referred to the office of the Montreal Light, Heat and Power Company in the Power Building. Can a company like this be classed as one of the little fellows? Can it even be classed as a bona-fide box manufacturing company?

In some cases "little fellows" have been favored with contracts, but not always in the way in which the Shell Committee would like to have us believe. A case in point is that of a man in a western Ontario town carrying on a little specialty business. He is in so small a way of business that we cannot get a report upon him from the regular mercantile agencies. This party however, got a contract

for no less than 25,000 shell boxes, and he did not manufacture them himself. Another firm produced the shooks, shipped them to him, and all he did was to nail them together. He has stated that he made a profit of $5,000 on the business.

The way in which this party happened to get his contract is interesting. He went to Ottawa—according to his own story—seeking a contract for the production of some part of a shell. At first he was not received kindly, but he presented his credentials from a man in his own town and then General Bertram asked him how he would like to have a box contract. Thus he obtained a contract for 25,000 boxes although he was not equipped to produce them, and had not asked for it, while many bona-fide box manufacturers were doing all they could to get contracts and were being told that all available contracts were let.

The Proposed Donation of Portable Houses to France

In the news columns of this issue we publish the substance of a circular which has recently been sent out at the suggestion of Sir Geo. Foster by the Ontario Department of Lands, Forests and Mines, suggesting that the lumber manufacturers, woodworking companies and the Government co-operate in **presenting** a certain number of portable houses for use in those portions of France that have been devastated by the armies of Germany, and are now again in the possession of the French people. This suggestion is being sent out also to the lumbering and woodworking companies of the provinces of Quebec, British Columbia and New Brunswick. From both a business and a patriotic point of view the suggestion is a good one and is meeting with the approval of the lumbering and woodworking industries.

It is to be regretted that this matter has been put forward in its double light as a patriotic move and also as a good advertising scheme. It would have been wiser to have said nothing whatever about the advertising end of the affair. In days like these our patriotism should be entirely unalloyed. If a scheme such as this inherently involves a certain element of advertising we should let that element look after itself and not seek to induce good Canadians to be patriotic by whispering to them that they will be getting a fine advertisement at the same time. However, it is not too late to-day to stop referring to the advertising end of the scheme and we hope that our suggestion about this will be followed out.

We understand that the recently formed Canadian Timber Products Association has placed itself on record as in favor of co-operating with the Government upon this plan. We have also received some letters from Ontario firms approving of it and we are free to admit that it will be a fine thing to do. We would, however, have greatly preferred that the Government should have put the matter before the lumbermen as a simple act of patriotism. We would go a little further and suggest that such a gift should not reach its destination under any possibly misleading conditions. There should be no question whatever, when these portable houses reach their destination, that they are the gift of our lumbermen, woodworkers and the Canadian Government. We fear, knowing something of the tendency of Canadian politics, whether guided by Liberals or Conservatives, that in the long run the users of these houses will have a very definite idea that they were presented by the Canadian Government, and a very hazy idea, if any at all, that Canadian lumbermen shared in the gift. We do not wish the Government to think that this is an ill-meant criticism, we are heartily in accord with the whole idea, but would like to see it adjusted so that the element of generosity on the part of Canadian business men will be given its full share of credit.

We would suggest, therefore, that the gift should go forward, in fact that it should be entirely handled and worked out by the official representatives of the lumber industry in Canada. The Canadian Lumbermen's Association, with headquarters at Ottawa, would be an excellent body to father this undertaking. They might be greatly assisted by the Canadian Timber Products Association, recently formed in Ontario. Under such conditions we feel sure that there would be a far more hearty response from the lumber industry and the woodworking industry in Canada. The Canada Lumberman would itself be very glad to take its share in such a contribution. The present plan is that the lumbermen should contribute the raw material, that the woodworking firms should work it up into the proper dimensions and that the Government should take care of the transportation. This sharing of the work is logical and right and should result in the work being done effectively and quickly.

Now that the lumber industry in Canada is being asked by the Canadian Government to come forward in this manner, we feel that the opportunity is a proper and a fair one for expressing some views that we have frequently heard mentioned by Canadian lumbermen to the effect that the Canadian Government has not lived up to its opportunities for assisting in the development of the Canadian lumber trade. Take for instance the matter of the export trade. Since the opening of the war the export trade in lumber has been greatly handicapped by the lack of tonnage for trans-Atlantic shipments and also by the excessive cost of freight on such vessels as have been available. The cost has risen from 40 shillings per standard hundred (1980 feet), to 200 shillings. So far as we have been able to learn our Government has not made sufficient representations in Great Britain, or taken sufficient other steps to have this situation improved. When Sir Robert Borden returned from his trip to Great Britain the Government press reported that he had been successful to some extent along this line and hinted that soon we would have relief. The price of space upon trans-Atlantic vessels, however, has continued to advance and so far as we can see there is no relief in sight. It may not have been possible to secure such relief. We do not know whether this is the case, but if it is so, we should have had some very definite explanation, from which we would have learned that the Government had done what it could. It is surely the duty of our Trade and Commerce Department to take up this matter and not to rest until it can give our eastern industries in particular a fair measure of relief.

Moreover we believe that in this portable house matter the Government should be doing more than it is. The time seems to be really at hand for securing orders for portable houses in Northern France and surely our Trade and Commerce Department should look upon its duties in a more definite light than it apparently has. The C. P. R. and the Canadian Manufacturers' Association have both sent men to Great Britain at their own expense to secure orders for Canada. Why should not the Department of Trade and Commerce select the most capable man in Canada whom they can find and send him to France, or to the best place for getting in touch with the portable house market? The Department ought to have taken this step long ago, so that its representative would now be on the spot and well acquainted with the whole situation. Unless this is done, the enormous trade which is certain to develop in portable houses and other business will not come to Canada.

Possibly, Canadian firms may individually or co-operatively send over representatives for portable house business, but we believe the task is so big that it should be handled by our Department of Trade and Commerce, and that the Minister of that Department should be a big enough business man to have taken this step long ago off his own bat. Our Trade and Commerce Department ought to be more of an actual business getting institution than it is. Germany in the past made its great commercial success because it realized this fact. Its Government was its chief selling institution. It did not content itself with long reports upon trade conditions, but it sent out its own Government representatives to open up, secure and develop trade.

We feel inclined to go a little further still and to bring in another line of thought that has been brought up on many an occasion in discussion among Canadian lumbermen. This is suggested to us by

the fact that our Trade and Commerce Department to-day is very ready to suggest that the lumbermen should co-operate with the Government in contributing portable houses for France. The Government knows that such a proposal will be readily agreed to. It knows that Canadian lumbermen are big minded and generous, and it knows that they will make this contribution in spite of the fact that they have had very little co-operation to thank the Canadian Government for in the past. Their generosity in this case will be promoted by their sympathy for their allies who have suffered in the war. If the question were one of doing something to assist the Government the response would be of a different nature. We do not refer to the present Government any more than to previous Governments. Take the matter of the importation of lumber into Canada. The lumber industry has invariably received ill-treatment from the Government in this connection. It has presented strong claims for a duty upon lumber. It has been entitled to this protection for many reasons which would be too long to enumerate, but our Governments have refused it. At the same time they have not hesitated to place heavy duties upon such machinery as the lumberman has to buy in order to operate his plants.

The Government may think that some of these things are extraneous to the portable house matter, but they are suggested logically by it. For this reason we want to repeat our conviction that the lumber industry will be ready to make a generous gift of portable houses to France, and our own personal desire to share in it, if it is kept free from any attempt to advertise Canadian products. The lumbermen ought to look after the matter themselves and not depend upon the Department of Trade and Commerce.

The public has not even yet the faintest idea of how rotten the shell box contract business is. We have not yet told all that we know about it, but will have something further to publish which will throw a vivid light upon some pretty dark corners.

Wood Block Paving—A Neglected Field for Lumber Sales

One of the most promising fields for the development of trade in connection with some of the chief Canadian classes of wood, is that of wood block paving. It is rather difficult to account for the neglect that this trade has met with in the past. Undoubtedly the efforts of the competitive lines of paving have had a good deal to do with this neglect. In view of the progress that has been made in other countries, however, it is safe to say that there might have been a much heavier volume of trade in wood block for paving purposes in Canada if the business had been systematically worked up, and the special fitness of wood for this service had been vigorously advertised. In all the large cities of Europe and most of those in the United States, wood block paving has already been thoroughly tested and has secured a strong foothold. Its advantages are so numerous, and so unquestionable, that its use is certain to grow rapidly, now that the experimental stages have been so successfully passed.

In Canada we have several classes of wood that are specially valuable for this purpose. We believe, for instance, that if the manufacturers of Norway pine would study the matter to-day and organize to promote publicity and to develop trade in wood block paving they would find a most gratifying and profitable result. In Europe, and in the United States, the bulk of the paving business in connection with wood block has gone to southern pine. The suitability of this wood has been demonstrated absolutely, and it is therefore unquestionable that Norway pine would fill the bill with every satisfaction and would, in all probability, provide even a better pavement than southern pine. A certain amount of wood block paving has been laid in large Canadian cities, and it has also given remarkable results. In eastern Canada, much of this paving has been in southern pine. It is the old story of the southern pine producer recognizing the field first and securing a strong hold upon the trade.

Canadian plants now turning out creosoted wood blocks for trade in Eastern Canada, find that southern pine is specified by most of the municipalities with whom they have business to transact. These producers however, would be in a better position if they were able to quote upon a Canadian block, and they would welcome the change which such a development would bring about in their business. The trade has apparently been placed upon a sound footing and is now ready to develop to an almost incalculable extent. Canadian lumber manufacturers ought to get into the field at once.

One of the most interesting tests in connection with various kinds of street paving was made on Holliday Street, Baltimore, Md. Under Government supervision several kinds of pavement were laid in strips from curb to curb, each strip being 30 feet wide. The strips included wood block, asphalt block, sheet asphalt and several makes of vitrified brick. These were exposed to the wear of traffic for four years. The result was overwhelmingly in favor of the creosoted wooden pavement, other pavements being more or less worn out. The city engineer of Baltimore in his report, stated that the creosoted wood block pavement was practically the only smooth block pavement for use on streets where traffic was heavy. As a result the entire area was repaved with wood blocks. In this case, the contractor, in correcting the grades, had to move the old wood block section, as well as the other sections, but he found the wood blocks in such excellent condition that he petitioned to be allowed to use them as part of the new pavement. The blocks were as good as new and the petition was granted. At present, the old blocks can be distinguished from the newer ones only by their dimensions, which happen to be different.

Creosoted wooden pavements, as they are now laid are entirely different from the wooden pavements of a generation ago when the blocks were laid loosely on a plank bed. The modern pavement is laid on a firm and hard bed of concrete which was unknown at the time of the former wood pavement. The concrete, finished with a smooth surface of cement forms an even and level foundation for the wooden blocks, and the resulting pavement has a smooth, well graded surface, which, after it has been pounded down a little by traffic, closely resembles sheet asphalt.

Another interesting case is that of the Brooklyn bridge between New York and Brooklyn. When the second New York-Brooklyn bridge, called the "Williamsburg bridge" was planned, much study was given to the pavement question, the object being to secure a pavement light in weight, yet of sufficient durability. This was found in creosoted wood block. These blocks are laid directly on a steel floor with the grain vertical, so that they cannot splinter or tear apart and traffic has practically no effect upon them. This pavement, instead of wearing out in a year as planking does, is expected to be good for at least a generation.

In Philadelphia, Market Street, the great central thoroughfare, had to be paved after the subway had been completed. The merchants of Market Street banded together to obtain a clean type of pavement which would invite traffic to that street. They secured expert advice and decided in favor of creosoted wood block. They persuaded the city authorities to agree to this, and the first creosoted wood block pavement was then laid in Philadelphia. The merchants of Market Street found that their work was more than justified. Vehicular traffic would go out of its way to use the creosoted wood block pavement, in preference to stone or asphalt on parallel streets. The pavements did not produce any dust and the air was entirely clear. Street noise was reduced to a low and not unpleasant hum. The pavement was clean and handsome and Market Street became "the show street of the city." The merchants found that their trade was increased, and land owners found that their land values advanced.

Similar cases can be reported from practically all the large cities in the United States and Europe. The matter is no longer open to doubt. The preliminary work has been done, and wood block paving is certain to be the great paving of the future. We believe, therefore, that something should be done immediately by Canadian manufacturers of such woods as are suitable, to develop a demand for their product.

In the Public Eye

A budget of comment on men and things of moment presented in the interest of public welfare, independent of party politics and with malice toward no one.

The United States mourns and refuses to be comforted because Britain is restricting her trade. Let our cousins gather what sunshine they can from the fact that prosperity is returning to their country, aided and abetted by sundry munition contracts and war prices for their wheat.

* * *

Here's hoping President Wilson in his excitement doesn't get his notes mixed and send the Kaiser one of those intended for his fiancee. Well now after all the mistake mightn't be noticed.

* * *

If the United States needs further proof that the blockade of German ports by the British navy is of the good old-fashioned variety it has only to apply to its ambassador at Berlin. He wants said blockade raised till he can get shoes, haberdashery, chewing tobacco and gasoline. There is nothing imaginary in a blockade of that kind.

* * *

Patriotism is the last refuge of a traitor and, though I would not like to go so far as to place some leading Liberal journals in the traitor class, it is rather amusing to contrast their present ebullitions of patriotism with their utterances of a few short months ago. When Premier Borden came back from England, declared the German peril real, and asked parliament to make a cool appropriation of $35,000,000 to the British navy, he doubtless knew that war was imminent. He also doubtless imparted this information to Sir Wilfred Laurier. But did the man who thumps his chest and claims "a British subject I was born," etc., rise to the occasion and give a practical demonstration of his patriotism? On the contrary he opposed the appropriation in the House and strangled it with his Liberal majority in the Senate. And the while these ultra-loyal Liberal journals shouted their applause. Now they jump to the other extreme and are madly impatient because the Government is not equipping soldiers fast enough and is not furnishing more troops than the Mother country asks us for. It pains me to say it, but one cannot help wondering whether this is pure patriotism or if it is not mixed with a slight desire to embarrass the Government and make political capital for use in elections.

* * *

The French Commercial Commission, which has just arrived in New York, will spend a cool billion for machinery, war supplies and foodstuffs. Will the Minister of Commerce kindly tell us what steps are being taken to ensure that Canada gets her share of this business. For you know our Minister of Commerce can make a rattling speech and as a financial critic he is in a class by himself. But as the man on the corner remarked "that line of stuff don't get us anywhere." A certain line of action that would bring results would be to some purpose.

* * *

The curse of Canada is too much politics. Every cabinet must have its party fence builders as well as its nation builders. The former are supposed to keep the party in power, while the latter do their work. But history shows that nearly every government Canada has seen has gone down to defeat because of the crude work of some of its "practical politicians." On the other hand the late Sir James Whitney adopted as his policy a blunt honesty that apparently cared not who it huffed or hurt Coming as it did after the political trickery that finally resulted in the downfall of the Ross Government it was refreshing.

* * *

And it is something more than a rough guess that the practical politicians had a finger or two in the shell game. It will be noticed that the shell committee was made up of a harmless board of a couple of manufacturers and a batch of government employees. The manufacturing members would probably not be too inquisitive so long as certain factories got their share of the contracts and the government employees could be depended on to do pretty much as they were told. With this combination, a certain secrecy and an expressed desire to spread the contracts so as to cover a commercial depression caused by the war, it was an easy matter to place the contracts where they would do the most good. Most of those contracts were given to the little fellows. Men with big propositions were given no encouragement at Ottawa. One responsible man who made a proposition to enlarge and equip an already large factory and turn out shells in quantities was turned down cold. And meantime from Ottawa itself emanated the cry "Big contracts for shells are being given to the United States firms. Why can't Canada get more of them?" Now people are asking if this cry was started simply to cover up the fact that all orders were being parcelled out among the favored few who were receiving from $2.90 to $5.15 for machining a dollar's worth of shell. Anyway, just as soon as the British Munitions Board was assured of sufficient quantities of shell at reasonable prices we find half a billion dollars of contracts being talked of for Canada. Somebody apparently has a lot of explaining to do.

* * *

A despatch from Ottawa says: "The munitions committee, it is intimated here, is averse to awarding any more contracts to the small factories and workshops." We have yet to learn why the little fellow, not the big fellow, originally got the orders.

* * *

When you recall that this trucking and trafficking was carried on while our Motherland was calling for munitions—while men were dying in the trenches for lack of munitions—you might reasonably conclude that the soldier's prayer was the grafter's profit. In France the other day a man who paid a commission to get a contract was heavily fined and sent to jail for ten years. In Canada a similar offender would probably be given a life sentence in the Senate or at least condemned to an Honorably Colonelcy. Such is the politics of Canada.

* * *

It now transpires that no member of the Cabinet ever asked the Canadian public for machine guns. And the question naturally arises: "If the public without being asked contributed $2,000,000 to provide our boys in the trenches with machine guns, how many million dollars worth of shells at actual cost would our factories have furnished if the Shell Committee had even whispered that the Empire needed them?" But the Shell Committee didn't whisper.

* * *

Safe home from their joy-ride across the continent with their select party of M.P.'s and Senators, Messrs. Mackenzie and Mann are reported down at Ottawa with their aprons held out all ready to let the Government drop another loan into them. Carrying on a war for the Empire is a small chore compared to building transcontinental railroads for private corporations. It is estimated that Canada has already given these corporations in cash and land bonuses a billion and a half.. Naturally they want more, on the principle that the more men get the more they want. But they might have the decency to wait till the war is over.

* * *

When Britain was placing orders for shells in the United States and Canadians were asking why parts of these orders were not placed in Canada, why was it that big manufacturers could get neither orders nor information concerning orders?

* * *

At the request of Sir Robert Borden, Mr. F. P. Jones, of the Canada Cement Corporation, has come forward with a sort of blanket denial of the story of his interview with the Premier re the shell game. According to Mr. Jones' statement, Mr. Thomas was not present at that interview, nor did he threaten to make a statement to the press if his tenders were not given proper consideration. He admits, however. that Sir Robert sent him to Mr. Thomas, and to ensure him due consideration in that quarter called up Lloyd George's representative and arranged the interview. In a note to the Ottawa Citizen Mr. Jones further states that at the interview arranged by the Premier Mr. Thomas informed him that tenders would be called for.

* * *

It would appear from the above that Mr. Jones is not taking the public entirely into his confidence. He neglects to mention why it was necessary to call on the Premier and later attend a Premier-arranged interview with Mr. Thomas in order to acquire the valuable information that tenders for shells would be called for.

* * *

He also neglects to mention whether he had first been to the Shell Committee with his proposition. Of course, if he had, it might be necessary to explain further why it was necessary to go to either Sir Robert Borden or Mr. Thomas in search of such valuable information as he received. Were not the Shell Committee representing Canada in regard to the purchase of shells? Were they not giving out information in regard to the asking for tenders? Were they not using their every endeavor and their undoubted business ability to secure for the Empire the munitions she needed and in the cheapest market? Apparently not, for Mr. Jones, according to his own statement, had to go first to the Premier and then to Mr. Thomas before he could discover that tenders were to be asked for. But please note the grateful sequel: "Our company again tendered, and, I am pleased to say, got business at the prices tendered by us."

* * *

Those little words "again tendered," are an indication that previous to his interviews with Sir Robert and Mr. Thomas his company had been in the field for shell contracts. Why doesn't Mr. Jones go a little further and tell the public why his other tenders had been turned down, and why he

found it necessary to go over the heads of the Shell Committee before his tenders received the consideration they merited, and his factories the orders subsequent events show they were entitled to?

Mr. Jones also makes a rather complicated denial of the statement that contracts had been let at prices higher than those quoted in his tender. Let me quote the extract from his note. "The article states: 'Shell contracts were let at prices higher than those tendered by the company which I represent.' As far as I know this is not correct. When we first tendered I believe no orders were placed."

It is easy to believe that the orders had not been placed when Mr. Jones first tendered. But from his own statement it is quite evident that this tender was turned down. Neither were the orders placed before his second tender went in, after his two momentous interviews. But will Mr. Jones deny that before those interviews tenders had been accepted by the Shell Committee and sent on to Lloyd George for approval? Of course, no orders could be placed till the British Minister of Munitions approved. And will Mr. Jones deny that he is now making part of those munitions at a price lower than the tenders accepted by the Shell Committee?

* * *

Blanket denials are not explanations, and explanations are in order at the present time. Mr. Thomas has stated that "profits of the manufacturers have been higher than they were entitled to"; the Shell Committee has been allowed to drift into oblivion, and evidently requested to do its drifting with the least possible noise; it has been replaced by a Munitions Committee, which is in the hands, and evidently under the complete control of Mr. Lionel Hitchens, who has come out from England as the personal representative of Lloyd George. What does this all mean? Why, if the story told in this column is not true, was the Shell Committee abolished? Why does Lloyd George find it necessary to send a man to Canada to boss the job? Why is Mr. Jones unable to get a contract till he calls on Premier Borden and Mr. Thomas, neither of whom has the power to award contracts, and "again" tenders? In short, if this whole story is wrong what is the right of it?

* * *

This column admitted on the start that it was impossible to get sworn statements. It is so still. Consequently, it is impossible to be exact as to details. But the essentials of the story of the breaking up of the shell game have yet to be denied. The interviews between Mr. Jones, Sir Robert Borden and Mr. Thomas took place. They were followed by the disappearance of the Shell Committee. A report was sent out from Ottawa that all munition contracts had been cancelled. A competitive system of tendering replaced the old haphazard system. And big firms got contracts who had not been able to get even information concerning them before.

* * *

There is not the slightest doubt but that if the industries of Canada were organized or mobilized, and their output ascertained, every factory capable of turning out munitions could be kept running night and day. Canada might just as well be furnishing the Empire with fifty millions of munitions a month as the twenty-four millions she is turning out now.

* * *

But did the Government make any endeavor to organize Canadian industries? On the contrary they turned the whole matter over to the famous Shell Committee, who formed a new family compact, discouraged manufacturers and so conducted things generally that David Lloyd George adopted as his motto "Put not your faith in Canadians," and sent a man over from England to do such buying as would keep the Dominion from becoming peevish.

* * *

The Toronto Telegram advises the Government to emulate Britain and appoint a big man as Minister of Munitions. even as Britain appointed Lloyd George. And perhaps if the suggestion were acted upon it is not too late for Canada to get a fair share of the business arising out of the war. But there are two things in the way. The first is finding the big man, and the second is divorcing politics from business in any transaction in which any Canadian Government has a hand.

* * *

Brig.-Gen. Bertram's confession of the incompetency of the Shell Committee, in connection with shell box contracts, is full justification for its abolition. But the trouble is that the evil done by committees does not die with them. This one has by its actions retarded the supply of munitions to the Empire when it most needed them, and it has lent itself to the creation of an impression, both here and in England, that the Government of Canada, which is giving its sons by the hundred thousand to keep the old flag flying, still places politics before patriotism.

SEARCHLIGHT.

A. K. Godfrey, secretary and treasurer of the Monarch Lumber Company, which has a number of yards in the Prairie Provinces, some seventy in all, in a short interview recently stated that during September of this year his company did more business than in any month of its history. During October the sales were almost equally large and the collections were quite satisfactory. This lumber had been sold almost entirely to farmers.

May Make Portable House Donation

Canadian Lumbermen Asked to Contribute Houses for the People of Northern France

At the suggestion of Sir. Geo. E. Foster, Minister of Trade and Commerce, a circular letter has been sent out by the Ontario Minister of Lands and Forests, and we understand, by the ministers of similar departments in Quebec, British Columbia and New Brunswick, suggesting that a donation of portable houses be made to France for use in those parts of Northern France which have been devastated by the Germans and are again in the possession of the French people.

The circular sent out in Ontario states that a committee has been operating for some time for giving relief to the French people, who have been driven out of their homes.

"What they need now, and will need still more in the near future," the letter says, "will be some sort of housing, cheap and easily constructed, which will be at least protection from weather conditions.

"In that respect the idea of knock-down houses or portable houses has gained ground and may develop into a very large method of ultimate relief. It has been suggested that the great lumber provinces should co-operate with their lumbermen, mills and factories to present to the French Government a number of these portable houses as a gift to relieve the destitution existing in these regions.

"The Committee has had plans prepared and they are now being worked out by practical lumber operators as to the cost of the same. The French Government has been looking into this matter, and it is quite probable that on the cessation of the war, or as the German armies are driven back out of the devastated districts, this method will be adopted to a large extent for the temporary housing of the people. A gift from the great lumber provinces in the shape of a number of these houses, labelled as a gift of Canada, and donating the Province from which they come, would serve, in so far as their number was concerned, to meet the wants of the people. The factory people are, I believe, prepared to make a very large number of these and to send representatives to Belgium and France at the proper time to undertake business negotiations.

"Could not this Government, the lumber mills and factories, unite in making a presentation of a certain number of these houses in knock-down condition, the factory men putting the final processes on the lumber cut to dimensions; the lumber mills providing as their part the lumber necessary therefor; and the Government of the Province, say, undertaking the cost of transport either to the port of shipment or to the port of destination.

These houses should be on hand for early spring of next year, so that there is a fair length of time to make decisions and carry them out.

Detroit Lumber Board of Trade Formed

The lumbermen of Detroit recently formed what is to be known as "The Detroit Lumber Board of Trade." A meeting was held which was attended by fully 225 representatives of the lumber and woodworking interests of Detroit and vicinity. More than 110 membership pledges were signed at the meeting. The object of the Board as outlined in the proposed by-laws, is:—"To promote every legitimate use of wood and to counteract false and misleading statements published regarding lumber; to educate lumbermen themselves to use better merchandising methods, to maintain a permanent exhibit of wood products, to furnish information to the public regarding wood preservatives, proper selection of materials, etc."

A number of interesting addresses were delivered by W. E. Brownlee, L. L. Barth, vice-president Edward Hines Lumber Company, Chicago, E. A. Guest, E. A. Sterling, Jeff B. Webb and Thomas Forman. Most of the speakers dwelt with emphasis upon the importance of educating the consumers to the proper uses of wood so as to meet the severe competition of wood substitutes. The enthusiasm of those present argued well for the success of the new Lumber Board of Trade.

Mr. Gordon McKay, provincial timber inspector for British Columbia, recently made a trip as far north as Shoal Bay, calling at all the principal islands in the Gulf and making several trips inland. He reports a noticeable difference in the activity of the lumber mills and logging camps as compared with the early part of the summer. Practically all of the mills and camps along the coast are being kept steadily in operation.

James Robinson, Millerton, N. B., states that the cut on the Miramichi River this winter will be at least one-third less than that of last winter. Many of the large operators are cutting only one-half as much as they did a year ago.

Lumbermen's Rights Upon Rivers Clearly Sustained

A judgment of much interest to logging operators and lumber manufacturers was given recently by Mr. Justice Middleton in the case of Lowery and Goring v. Booth. A cofferdam built by the plaintiffs in the bed of the Montreal River was destroyed by the defendant's logs passing down the stream and the plaintiffs brought action for damages. Mr. Justice Middleton held that the Rivers and Streams Act conferred upon lumbermen the right to use streams for the flotation of lumber without immunity from damage for injuries done to the properties of others, unless it could be found affirmatively that the operations were conducted negligently and with reckless disregard of the rights of others. "Unnecessary damage" referred to in the act, he held, meant damage which could be avoided by the exercise of reasonable care and caution. Mr. Justice Middleton held that there had not been such disregard of the plaintiffs' rights as to constitute "unnecessary damage." The utmost that could be required of the defendant was that he should refrain from doing an unnecessary negligent act. He was not called upon to erect any structure or to protect the plaintiffs' dam by glance-booms, or similar devices.

In the course of his judgment Mr. Justice Middleton said:—"The rivers of the province are regarded as great highways for the transmission of timber, and the province has seen fit to confer upon those engaged in lumbering extraordinary rights and privileges in connection with these rivers. The timber industry is one of vital importance to the province, and, apparently as a matter of public policy, the paramount right is given to the lumberman to take his timber down the streams, so long as he does not do unnecessary damage; which I interpret as meaning damage which could be avoided by the exercise of reasonable care and caution."

After discussing the meaning of the term "unnecessary damage" Mr. Justice Middleton said:—"I, however, prefer to base my decision not upon definitions found in dissimilar cases, but upon the broad principle that this statute intended to confer upon lumbermen the right to use streams for flotation of timber with immunity from damage for injuries done to the property of others unless it can be found affirmatively that the operations were conducted negligently and with reckless disregard of the rights of others; and, as I am unable in this case to find that negligence has been made out, the action fails."

C. Beck Mfg. Co. Wins Appeal Against Judgment

In a judgment recently given by Mr. Chancellor Boyd at Osgoode Hall the decision given in a trial action at Sault Ste. Marie, brought by Richard Hunt and W. J. Smythe, of Rydal Bank, Algoma District, against the C. Beck Manufacturing Company, Penetanguishene, Ont., was reversed. The plaintiffs objected to dams built by the C. Beck Mfg. Company at one of the outlets to Lake Carpentier, which resulted in their timber being left high and dry. In the trial action they asked for damages to recompense them for the extra time and trouble they expended in getting the lumber down, and the trial judge awarded them $2,000. The C. Beck Mfg. Company appealed against this, and Chancellor Boyd found that the lumbermen had not established a case for damages and reversed the decision of the trial judge.

A case of interest to the lumber trade was heard last week in the Supreme Court in that of Martineau vs. Stewart and the Bank of Nova Scotia. In the action Mrs. Martineau claimed damages from Stewart for trespassing on timber limits held by her under lease from the Seminary of Quebec, on the Huron river, and cutting therefrom about 10,000 cords of pulpwood. She also demanded an account of profits under an alleged partnership between herself and the defendants, giving her the right to one third of the profits. A conservatory seizure was made of the pulpwood,, but when the defendants transferred the wood to the Bank of Nova Scotia for advances, the bank intervened, claiming that the seizure had been improperly made. Both courts below dismissed the action of the plaintiff, maintaining the intervention of the bank and holding that no partnership had been proved. At the conclusion of the hearing the Supreme Court reserved judgment.

Whalen Brothers Win Action Against Lumber & Pulp Co.

Judgment has been given by Mr. Justice Gregory at Vancouver, B. C., in the action brought by Messrs. George F. and John A. Whalen against the Colonial Lumber and Pulp Company, in which the plaintiffs sought a declaration that an agreement entered into between the two parties was binding and for an injunction restraining the defendants from entering into another agreement with any other parties which would in any way abrogate the rights claimed by the plaintiffs. His lordship found for the plaintiffs, granting the declaration that the contract between the plaintiffs and the defendants is a subsisting contract, and also granted the injunction asked for by the plaintiffs. With regard to the question of relief by forfeiture his lordship instructed counsel to draw up a settlement between themselves and submit it to him. With regard to the injunction it will be continued until the matter is finally disposed of. The suit arose from plans at one time under way between the plaintiffs and the defendant for the establishment of a large pulp mill on Quatsino Sound, and the flotation of $2,000,000 worth of bonds. The plaintiffs, under the agreement were to perform certain work and, alleging that this work had not been performed by the plaintiffs, the defendants refused to continue the agreement, but entered into negotiation with Mr. Lester David on another agreement.

Hardwood Business Improving

The monthly report of Actual Sales issued by the Hardwood Manufacturers' Association, covering actual sales made by Association members in the various consuming markets, shows that the volume of business has increased to a marked degree with some improvement in prices due to increased demand from consumer, and reduction of stocks at the mill points. Statistics which the Association is keeping on this line of its work show that the volume of business for October increased 30.4 per cent. over the month of August, and 51.1 per cent. over the month of September.

Data Wanted on Canadian Timbers

Toronto City Architect Asks for Information About Comparative Strengths—Building By-law being Revised

The city architect and superintendent of buildings for Toronto, Mr. W. W. Pearse, has sent a circular letter to the lumber trade in Toronto in which he calls attention to the fact that the city is at present revising the by-law pertaining to building. Upon looking over his records, the city architect finds that he has on file very little data on the subject of tests of Canadian timbers. He suggests, therefore, that the lumbermen of Toronto should work in conjunction with his department in an endeavor to have a number of tests made on Canadian timbers, so that he may be in a position to give them full value in the new by-law. He suggests also that a committee should be formed among the lumbermen of Toronto so that they may be able to go into the subject in a thorough and systematic way.

Mr. Pearse states that he has already met with much success in co-operation with the Brick Manufacturers Association, resulting in their bricks being tested. He is confident, he says, that this will help him to give higher values for the brick work than those found in the present building code. He is equally anxious, he says, to be able to give higher values for Canadian timbers than those allowed by the present code. This will cheapen building construction and will allow large manufacturing companies to build in Toronto.

In the course of his circular Mr. Pearse says:—"As there seems to be a little misunderstanding on the part of some of the builders in Toronto that this Department is requesting certain classes of buildings to have certain kinds of wood, I wish to say that this is not so. Any owner or builder can use any type of construction or any material that is given in By-law No. 6401. This Department has never in any way endeavored to get people to use any particular kind of timber on their building other than what they saw fit to use themselves.

"I might also add that Georgia or long leaf yellow pine and Douglas fir or British Columbia fir have 1,600 pounds per square inch."

The above communication from the city architect has been received with great interest by Toronto lumbermen. It is being taken up for discussion by the Lumbermen's Section of the Toronto Board of Trade and unquestionably they will take steps to co-operate with Mr. Pearse.

One of the most important tables of information regarding the strength of Canadian and United States timbers which is at present available is contained in a circular recently sent out by the Forest Branch of the Department of Lands for British Columbia. The report is in part as follows:—

Species	Average Modulus of Rupture per Square Inch			Average Fibre Stress at Elastic Limit per Square Inch		
	Grade 1	Grade 2	Culls	Grade 1	Grade 2	Culls
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Douglas Fir	6,919	5,564	4,174	4,402	3,831	2,914
Longleaf Pine ...	6,140	....	....	3,734	....	....
Shortleaf Pine ...	5,849	4,739	....	3,318	3,005	....
Western Larch ..	5,479	3,543	....	3,662	2,432	....
Loblolly Pine ...	5,898	4,702	3,416	3,513	2,793	2,258
Tamarack	5,469	4,525	3,008	3,151	2,847	2,097
Western Hemlock	5,615	4,658	....	3,689	3,172	....
Redwood	4,932	3,091	....	4,031	2,947	....
Norway Pine ...	4,821	3,764	3,255	3,082	2,364	2,144

We have also in our possession a copy of a report compiled from McGill Testing Laboratory Results. This table was compiled some

years ago, but is considered by lumbermen to be a fairly practical table for use at the present time. We reproduce below a portion of this table. In it the range in strength is in tons (2,240 lbs) from ordinary commercial wood to a very high quality. The range in weight is from well seasoned to poorly seasoned wood. The table is as follows:—

Description of Timber	Tensile Strength in tons per sq. in.	Compressive Strength in tons per sq. in. along fibres	Shearing Strength in tons per sq. in. along fibres	Co-efficient of Bending Strength in tons per sq. in.	Weight in lbs. per cu. ft.
Ash, Canadian	2.45	2.4	.2 to .312		47
Beech	4.9 to 9.8	3.67			43 to 53
Birch	6.69	1.47 to 2.27	.25 to .3.64		45 to 49
Cedar	2.23 to 4.9	2.56			35 to 47
Douglas Fir	7.54	3.52	.22	670 to 810	34 to 40
Elm, Canadian	4.3	2.9			47
Maple	4.7 to 7.7	2.23			49
Oak, American				2.712	
Oak, Red	4.46	1.89 to 2.6	.324 to .446		61
Oak, White	8.8	2.84	.335 to .431	4.55	61
Oak, English	5.4	4.4			49 to 58
Pine, Dantzic	3.5				36
Pine, Pitch	4.6	3.5			41 to 58
Pine, Red	1.7 to 6.67	2.4 to 3.6		3.71	34
Pine, Yellow	2.2 to 6.86	2.4 to 3.6	.227	4.51	32
Pine, White	1.3 to 5.1	2.24	.119 to .164	3.03	30
Poplar	2.94	1.8			23 to 26
Spruce	2.99 to 5.97			1.63 to 2.86	
Sycamore	5.8	3.16			36 to 43
Walnut	3.5	2.7			38 to 57
Hemlock	1.6 to 6.67	3	.305	371	27 to 38

The Rebuilding of Belgium

"The Chance for British Firms in the Rebuilding of Belgium" is the title of an interesting booklet which we have received from Technical Journals Limited, 27 Tothill Street, Westminster, London, England. Under present conditions, with Belgium devastated and in the hands of the Germans, and with the absolute certainty that it will soon again be in the hands of the Belgian people, such a book is extremely interesting to Canadians who are engaged in the production of building materials, such for instance as lumber and its products. While it deals especially with the problem from the point of view of English firms, the information contained is of a general nature which will be useful to Canadians also. Under present conditions, it is not possible to give actual lists of materials required and prices that will be secured, but the author is able to present in brief form a practical outline of industrial and commercial conditions prevailing in Belgium, dwelling upon the chief considerations that will have to be borne in mind when the reconstruction period comes. We cannot quote extensively from the book, but a few quotations will serve to demonstrate its scope and interest.

"It is obvious that when the time comes for the reinstatement of Belgium and the rebuilding of the property destroyed in the course of the present war, a very big task will have to be faced, and this can only be economically and effectively carried out by full preparation beforehand. Much, in a general way, has already been said on the subject, more especially in regard to the schemes that shall be adopted for the layout of Belgian towns and villages in conformity with modern ideas, but little information of a definite practical character has been put forward. Yet without this information it is impossible for British firms to form any adequate conception of the requirements that will have to be met, and the business conditions under which the work of rebuilding Belgium will have to be carried out.

"As will be realized, British firms will have the chance of securing a very large volume of trade which the rebuilding of Belgium will involve. They are in a position to obtain the preference in securing this trade. France will be fully occupied with the rebuilding of those of her departments which have been devastated by the Germans, and British firms therefore should not be wanting in the enterprise that will gain for them not only immediate business on a large scale, but also favored treatment in respect of trade in Belgium for years to come. Before the war the building industry in Belguim was very largely financed by Germans. With their acknowledged business acumen, the Germans made themselves familiar with the needs of Belgium, and supplied material and plant to Belgian builders on special terms of credit. In this way they gained a position in Belgian trade far ahead of that of any other foreign country."

An interesting table is then given showing that the imports into Belgium during 1913, the last official reports available, were as follows:—United Kingdom, 156,038,642 kilogrammes; Germany, 322,256,736 kilogrammes; France, 145,096,746 kilogrammes; Netherlands, 38,073,465; United States, 9,361,978. One thousand kilogrammes are approximately equal to one ton.

"It will be seen from the foregoing what a predominant share the Germans had in Belgian trade. The figures are for a normal year. In the forthcoming rebuilding of Belgium the requirements, of course, will be far and away in excess of the normal. The Belgians are determined not to take up again their business relations with the Germans; they look to Great Britain for the help they will need; and they will be eager to extend a great welcome to British traders. It will depend entirely upon British firms themselves whether they seize the chance thus offered to them. They will need to make themselves familiar with Belgian requirements, by either sending special representatives to Belgium immediately the war is over, or by appointing agents there to act on their behalf. It will be futile to wait for the trade to come here, because in the meantime other foreign firms will secure the market."

The book then gives an outline of the financial accommodation which Belgian contractors will require for the work of reconstruction. Special attention is drawn to the fact that after the war the Belgians will not be able immediately to resume cash payments. They will require credit until they have had time to recuperate. The Belgian reputation for honesty in commercial and industrial transactions is well known. In this connection the book says:—"Commercial confidence and credit run but little risk when they are accorded to a people having such a brilliant past, and who, under most crucial test, have proved to the world the value they attach to their plighted word. A nation that has thus valiantly and unhesitatingly made such tremendous sacrifices to honor its own signature, a nation of such indomitable spirit, splendid courage, and tireless energy, has afforded the most convincing proofs of a magnificent endowment of that good faith which is the firm basis of commerce and industry."

It is interesting to note, moreover, that according to Belgian law special facilities are afforded, the formalities of which are simple, and by means of which contractors and others supplying material are able to secure liens upon the selling price of the property.

Under the heading of "construction" the book calls attention to the classes of material that will be required and rather discourages the expectation that "provisional buildings" will be erected. On this subject it says:—"We think it safe to say that having regard to the disappearance of all materials and primary products it will not be possible immediately to find in Belgium the means for constructing provisional buildings.

"To obtain from abroad in large quantities the materials needed for that will cost as much as to import materials suitable for permanent construction, but after a provisional reconstruction there would still be required a permanent one, involving thus a double expense, which might be avoided and the money thus saved applied to other things. For these reasons of practical economy we consider that the idea of a provisional reconstruction must be abandoned."

The author of the above booklet is a well-known Belgian contractor, M. Leon Lootens, who prepared it in corroboration with the legal advisor to an important association of Belgian contractors.

Timberlands Administration Criticized

The Canadian Commission of Conservation have reprinted in booklet form the interesting paper contributed to the 6th annual report by Dr. B. E. Fernow, upon Co-operation in Forestry. Dr. Fernow criticizes forcibly the present administration of public timberlands by the Dominion Government, calling attention to the fact that three separate and independently organized government branches divide authority in the administration of the public timberlands. These are, the Timber Branch, in charge of licensed timber limits; the Forestry Branch, in charge of the Forest Reservations, curtailed however, by the timber limits within the reservations which had been licensed before the reservations were made; and the Parks Branch, which has charge of still other portions of timber area. "Each of these branches," Dr. Fernow remarks, "works without any organic relation to the other and in some cases exercising functions and divided authority over one and the same territory. Anyone with experience in business organization will admit that this is not good business." Dr. Fernow suggests that a rational arrangement would be to place the administration of the timber limits within the reservations at least, wholly for the Forestry Branch. There would then be a territorial sub-division of authority which would obviate antagonism between different policies. He then refers to the impossibilities of developing the technically sound administration through political appointees. The service ought to be independent of political changes, for in forestry work, more than in any other business, persistence and permanence are essential requisites.

According to a press despatch from Aberdeen, Wash., the lumber mills in the Grays Harbor district are figuring on an order for 30,000,000 feet of fir wanted by the allies to line trenches in France. The conditions of the order are that the lumber is all to be of the same dimensions, viz., 2 in. x 6 in. x 10 feet.

A Lumberman's Family of Soldiers

Three Sons of Wm Power, Quebec, now in the Ranks—Two in the Trenches—Brothers' Strange Meeting

Wm. Power, Quebec, P.Q.

One of the best known lumbering families in Eastern Canada is that of Mr. Wm. Power, M. P., head of the large firm of W. & J. Sharples, Reg., Quebec, P. Q., and father of several sturdy sons, some of whom have been engaged in the lumbering business and three of whom are serving the Empire, either in the trenches or in training.

Lt. Joe Power, of Quebec, went to the front as a private. He had been an officer in the Queen's Own Hussars, but was too keen upon seeing service to wait for a commission and enlisted as a private in the infantry. Very few mounted men were taken with the first contingent. As Private Powers, he was in camp with the first contingent at Valcartier and Salisbury Plains. Soon after his arrival at the front Private Power was promoted to Lieutenant, for gallantry in action. Previous to enlisting Lt. Power was in the employ of W. & J. Sharples Reg., and had formerly been with the River Ouelle Pulp & Lumber Company, St. Pacome, P. Q. He is now lieutenant in the 2nd Battalion, having obtained his commission during the month of May.

The other brother who is now in the trenches is Lieut. Chas. G. Power, who is with the 23rd Battalion, C. E. F., on active service. These two brothers were widely known throughout Quebec as hockey players. They were remarkably skillful and popular as members of the Quebec Hockey Club. Chas. G. Power, before enlisting was engaged in practising law.

A third brother, Lieut. Frank Power, enlisted recently at Port Arthur, Ont., but has been transferred to St. John, N. B., where he is with the 52nd Battalion. Lieut. Frank Power was formerly an accountant in the Union Bank of Canada at Quebec.

An interesting item of news regarding the two brothers now in the trenches was recently published in the daily press. These two brothers, Joseph and Charles (Chubby) Power, are "somewhere in France." They had not seen each other for nearly a year, when one night recently, as one corps was leaving the trenches and being relieved by another, Joe and Chubby met. One brother was about to take the other's place in the trench. The night was dark, but not too dark for the boys to recognize each other, and the meeting, though necessarily short, was touching.

We have pleasure in publishing herewith the photographs of Mr. Wm. Power, M. P. for Quebec West, and his three sons who have volunteered, also of Mr. W. Gerard Power, a fourth son. Our readers are also well acquainted with the career of Mr. W. Gerard Power, who is manager of the River Ouelle Pulp and Lumber Company, St. Pacome, P. Q., one of the most successful and progressive lumbermen of the younger generation in Canada to-day.

The Bushfield-Martin Lumber Company

The Bushfield Martin Lumber Company, Huntsville, Ont., which has recently been formed, is composed of Messrs. Geo. Bushfield and M. Martin, both of whom were formerly with the Muskoka Wood

Geo. Bushfield, Huntsville, Ont.

M. Martin, Huntsville, Ont.

Manufacturing Company and are well known to many lumbermen in Ontario.

Mr. Geo. Bushfield has been engaged in the lumber business for the past thirty years, having started when a young man in 1885, in connection with the manufacture of furniture. He followed the furniture business for over fifteen years, during which time he was able to gain a thorough and practical knowledge of all Canadian and American products in this line of business. He then became connected with the manufacture of hardwood flooring, and the thorough and practical experience which he had previously secured was of great assistance to him in buying and manufacturing large quantities of hardwood. His practical knowledge of the kinds of lumber that worked out to the best advantage in the production of different lines enabled him to buy the right class of stock and also to sell to the customers what was best adapted to their needs.

During the past eight years Mr. Bushfield devoted his whole attention to the buying and selling of lumber and hardwood flooring for the Muskoka Wood Mfg. Company. As a salesman he travelled from coast to coast in Canada and also through the Eastern States. He had been with the Muskoka Wood Mfg. Company for the past twelve years, first as superintendent and then as salesman. Previously he had been assistant manager of the Canada Wood Specialty Company, Orillia, Ont., and previous to that he had had experience with different woodworking plants throughout Ontario. Unquestionably, the wide and varied experience which Mr. Bushfield has had will fit him splendidly for the wholesale lumber business which he has now taken up.

Mr. M. Martin, the other member of the firm, has had an extensive experience in connection with the lumber business and also in banking. During the past four years he has been secretary-treasurer of the Muskoka Wood Mfg. Company. Previous to that he was on

Lieut. Charles G. Power, 3rd. Battalion, 1st Contingent, now in France.

Lieut. Frank Power, 52nd Battalion. now at St. John, N. B.

Lieut. Joe Power, 2nd Battalion, now in France.

W. Gerard Power, River Quelle Pulp & Lumber Co , St. Pacome, P. Q.

the staff of the Traders Bank of Canada. He spent about eight years in banking and secured a knowledge of credit and financial work.

While the firm will make a specialty of Canadian hardwoods, it will also handle soft woods. Their head office is at Huntsville, Ont.

From the Reader's Point of View

Better Conditions Reported from Many Places

Improvement in Western Trade

Editor, Canada Lumberman:— Fraser Mills, B. C., Nov. 28th.

Viewing the situation as it exists to-day, by comparison with the same time last year, I would say that the outlook is indeed more hopeful than it has been any time during the past sixteen months. The great grain crops of the Canadian Northwest are bringing into that country an enormous amount of wealth, which will go a long way toward liquidating the obligations of the farmers and merchants, and will also be a stimulus to the railroads and in turn to the manufacturers and wholesalers of Eastern and Western Canada.

After all, we are more largely dependent upon our domestic market than many have hitherto realized. I think that Canada is to be congratulated on the magnificent way in which the country has stood up under such an unprecedented drain of men and money, caused by the war.

In our business, we feel that the future has some ray of hope, appearing from behind the clouds, which, until the crop was assured, were certainly very dark.

As regards the possibilities of export trade, in my opinion, we at the Pacific Coast can not look for any material betterment in this market until freight conditions take a decided change from the present high rates and shortage of tonnage.

The conditions in the Gulf States of America, according to reports which we have, are materially improved and mills there are experiencing a satisfactory volume of business and betterment in price conditions, which is most encouraging and this will no doubt have a tendency toward keeping the Southern mills from demoralizing the Canadian market, as they have done in the past.

The mills of British Columbia have reason to expect that their trade in Eastern Canada, particularly from Toronto east, will be much improved, provided the price in southern pine is increased, which will have a tendency toward allowing us to ship our lumber stocks to markets hitherto enjoyed by our American competitors.

The tremendously high cost of transportation is the serious obstacle which has to be overcome before our markets in Ontario and the Maritime Provinces will ever be on a really profitable basis—H. J. Mackin, Canadian Western Lumber Company, Ltd.

Expect Good Substantial Winter Trade

Editor, Canada Lumberman:— Sarnia, Ont., Nov. 19th.

While our trade this year will fall short of our business in 1914, we are finding that the months of August, September and October of this year are exceeding the trade in the months of August, September and October 1914, and from the present outlook we feel that we will do a larger business during the balance of this year than we did in 1914.

On the whole our business will only be between one and two per cent. less this year than last, and we are inclined to believe that we are going to have a good substantial winter trade.—Cleveland Sarnia Saw Mills Company, Ltd.

Decided Improvement Reported

Editor, Canada Lumberman:— Pembroke, Ont., Nov. 19th.

We find a decided improvement in the lumber market as compared with six weeks or two months ago. There is considerable demand for all grades of lumber in pine and spruce and the prices are as good, and in some cases better than they were a year or so ago.

We have not been manufacturing hardwood but are taking out a considerable quantity this winter. Our mill output this year is 25,000,000 feet, as compared with 15,000,000 feet a year ago, and with the exception of a few lines, our entire output has been disposed of.—The Colonial Lumber Company, Limited.

Heavier Shipments During Past Three Months

Editor, Canada Lumberman:— East Angus, P. Q., Nov. 20th.

Our shipments during the last ninety days have been very much in excess of what they were for the same period last year. We believe that the abundant crops raised in this country and the extra demand for labor in the manufacture of war material, will materially help the lumber situation in the very near future. We will cut about the same amount of timber this year as usual.—Brompton Pulp & Paper Company.

A Successful Government Official

The accompanying portrait is of Mr. C. C. Hele, who, while not personally known to a great many members of the lumber industry, occupies a position in the Department of Lands and Forests in which his duties are extensively related to the lumber industry of Ontario. Mr. Hele was recently appointed to fill the vacancy caused by the death of Mr. E. S. Williamson, former secretary of the Department. At the same time, his capabilities are so appreciated by the Minister of Lands and Forests, Hon. G. Howard Ferguson, that he will continue to occupy also his former position of secretary to the Minister.

C. C. Hele,—New Secretary of Ontario Dept. of Lands, Forests and Mines.

Mr. C. C. Hele was engaged from 1906 to 1910 as private secretary to Mr. Joseph Thompson, Commissioner of Industries and Publicity for the city of Toronto. In the fall of 1910 he resigned this position to go into the automobile business. Subsequently he entered the service of the Ontario Government as private secretary to Hon. W. H. Hearst when the latter was called to the cabinet to accept the portfolio of Minister of Lands, Forests and Mines. When Hon. Mr. Hearst succeeded Sir James Whitney as Premier, Hon. G. Howard Ferguson was appointed Minister of Lands, Forests and Mines and Mr. Hele continued as private secretary to the new Minister.

Westerner Surprised by Eastern Prosperity

That there is every prospect of a good business for coast fir in the markets of the east when the Panama canal is re-opened and bottoms obtained for carrying is the opinion of Mr. J. E. Dougherty, vice-president and general manager of the British America Mills & Timber Co., Ltd., who has just returned from an extensive trip through eastern Canada and the eastern United States. During his trip Mr. Dougherty visited many lumber centres and of all the sections of the country he was in, Quebec city struck him as being the least affected by the prevailing conditions.

"The people in Quebec," he says, "appear to have gone on with their business without any thought of the war and when the ordinary visitor goes to that city he is at once struck with the apparent business activity. Millmen there tell me they are very busy, so much so that they are actually advertising for men, there being a shortage of certain kinds of mill labor. From what I saw of Montreal that city, too, appears to be enjoying a good measure of prosperity. All the stores were busy and I should say from casual observation that business men there are well content with the general conditions of trade.

"The lumber business in the eastern United States is very active. There is an unusually heavy demand for yellow pine. This is probably owing to war orders for pine in making cars. At the present the southern mills have all of this business. They enjoy a cheaper rate on the southern roads than we do for fir on our roads. The city of New York is also using tremendous quantities of yellow pine in subway construction. With the large orders now being placed for the lumber in Louisana, Texas, Mississippi and Arkansas, it is generally anticipated that prices will stiffen up considerably, millmen being unable to meet the demand. Naturally, this should create a market for coast fir with good prices, and many whom I met are anticipating this.

"In the prairie provinces the only demand for lumber is in the country, there being little if any building going on in the cities. The lumber trade was very brisk during September and part of October on the prairies and prices stiffened. There have been exceptionally good crops and the farmers are in a position to buy. Lumbermen are looking forward to prairie business picking up considerably in the spring in the cities, but then again it is difficult to prophesy as there are so many things during these times that can upset all calculations.

"There is no question but that if we had the bottoms to take care of the business we could do a big business in British Columbia fir in the eastern market, where fir can be used to such good advantage now and where long timbers are in demand."

Mr. W. A. Anstie, managing director of the Forest Mills of B. C. Ltd., Revelstoke, B. C., is on a visit to London, England.

Creosoted wood block paving on Terauley St., Toronto.

Creosoted wood block paving on Bloor St., Toronto.

Great Opportunity for Extending Wood Trade

Wood Block Paving Business Should be Worked Up

Within comparatively few years the use of wood block paving has made very rapid strides in the large cities of Europe and the United States, and to quite an appreciable extent in Canada. The use of this paving is certain to increase enormously in the very near future. There is a splendid opportunity for Canadian woods to develop in a practically new and exceptionally valuable market in this connection. A few of the interesting facts connected with the business will show definitely why this is the case.

In recent years the increase in use of creosoted wood blocks in Canada for paving purposes, especially for streets on which there is heavy traffic, and for street railway track allowance, has been a steady one, as the following estimated figures will show:

	In Use 1900 to 1912	Laid In 1913	1914
Hamilton	3 Miles	44,473 Yards	20,000 Yards
Toronto	8.77 "	25,783 "	30,900 "
Ottawa	.41 "	2,640 "	22,000 "
Vancouver	22.3 "	10,587 "	27,268 "
Berlin		.....	11,900 "
Peterboro		.....	4,000 "
Sherbrooke		.....	9,000 "
Welland		.....	6,280 "

This increase has been more than justified by experience with similar pavements in the United States and England, a few reasons being:

Wood blocks have all the smoothness of asphalt without any of the holes and depressions in the surface. On a wet day, asphalt collects and holds pools of water, or rather, pools of slippery slush. A well laid creosoted wood block pavement never develops these depressions.

Water settling in depressions in asphalt rots the asphalt gradually and the hole grows worse. Creosoted block, having been waterproofed, is not similarly affected.

The effect of the heaviest traffic on creosoted wood block is to compress the wood, possibly one-eighth of an inch, into an even tougher, stronger surface. There is almost no wear at all, consequently any dust to be found upon a wood pavement comes from outside sources. The wood, of itself, creates no dust. The method of laying obviates brooming or splitting.

There is no creeping and rolling as is the case with asphalt, consequently the contour of the wood pavement remains unchanged and perfect.

Any brilliant pavement, such as brick or stone, granite, or Belgian block pulverizes and grinds under traffic. Stone blocks for in-

Highway bridge paved with creosoted wood blocks, Dundas St., in York Co., Ont.

Creosoted wood block paving on King St., Hamilton, Ont.

stance, though specially roughened when new, soon wear smooth and then become rounded. No further evidence of this fact is needed beyond the noise and racket of heavy traffic on such pavements.

All the great "show" thoroughfares of Europe and America are paved with wood block, not only because of the attractive appearance of such pavement, but because of the noiselessness secured thereby. In Paris, for instance, we find the Champs Elysees, Place de la Concorde, Rue de Rivoli, Rue de la Paix, Place de l'Opera, Boulevard Haussman, etc., paved with wood block.

In London, wood pavements are almost everywhere in evidence on the main thoroughfares, such as the Strand, Oxford Street, King William Street, Queen Victoria Street, and the long, efficient service rendered by these pavements has confirmed the belief that creosoted wood block paving is the most durable of all pavements, and certainly the quietest.

Asphalt cannot be laid satisfactorily close up to street car rails for two reasons. First, the enormous vibration of passing cars breaks and turns up the edges of the asphalt. Second, in the small crevices so formed, wagon wheels grind down and make the ruts wide and deep. Wood blocks can be, and are, laid right close up to the tracks and give perfect service in this position.

Asphalt, in summer time, softens very considerably, as is evidenced by the surface being very easily indented with the wheels of heavy traffic and with the horses' hoofs, and instead of offering low tractive resistance, it "pulls." This was proven in the series of tests conducted a few years ago by the Works Department of the City of Toronto.

The following extract is from a report made by Dow & Smith of Boston, the leading consulting, inspecting, and testing experts on pavements:

"Probably the oldest pavements in this country laid with creosoted wood blocks of the type now in use, are in Boston, Massachusetts, on Tremont and Boylston Streets, which have recently been inspected with the following results. Both these streets were laid in 1900.

"Tremont Street, which carries a heavy traffic, was divided in half longitudinally, one side being laid with sheet asphalt and the other, concurrently, with creosoted pine blocks, both halves being thus subjected to the same traffic.

"The half of the street paved with asphalt has had extensive repairs, and is at present in bad condition, numerous holes having developed. The pavement was originally laid three inches thick, composed of one-and-one-half inches of binder, and one-and-one-half inches of wearing surface, and the wearing surface is worn down in many places to less than one-half inch in thickness.

"A straight edge laid upon the wood blocks where they adjoin the asphalt, both having been laid originally to the same grade, shows a difference in level of approximately three-quarters of an inch, proving that the asphalt has worn down that much.

"This difference added to the average thickness of the remaining asphalt pavement would show that the wear of the blocks has been practically nil. The condition of the blocks themselves confirms this, as even where the pavement is practically grooved by separating the blocks, the tops of the blocks show no brooming whatever.

"To all appearances, these wood blocks in Boston, although subjected to severe traffic for the past nine years, are practically as good as the day they were put down. There has been no maintenance cost whatever during the nine years the pavement has been in place.

"The asphalt on the other hand has been repaired to an extent involving the replacement of from twenty-five to fifty per cent. of the original area of the pavement, which is what would normally be expected under the prevailing traffic conditions with an asphalt pavement laid in accordance with the best modern practice."

A Few Statistics

	Square Yards of Creosoted Wood Block
Toronto has laid since 1909	122,000
No repair bills to date.	
Hamilton has laid since 1907	285,000
No repair bills to date.	
Greater New York City has laid since 1902	1,635,849
No repair bills to date.	
Chicago has laid since 1902	1,567,027
No repair bills to date.	
Minneapolis has laid since 1903	1,232,814
No repair bills to date.	
San Francisco Dock Department has laid since 1907	198,327
No repair bills to date.	
Boston has laid since 1900	567,982
No repair bills to date.	

The experience and data heretofore available on wood blocks have been largely based on American woods and naturally our Canadian municipalities in the east particularly, when adopting this pavement, have been inclined to stipulate that the wood shall be Long Leaf Yellow Pine, to the detriment of our own Canadian Red Pine (Pinus Resinos) which should be utilized in Canada exclusively; for the following reasons:

1. Cost of the lumber is lower than American woods can be laid down for.

2. The experience in England, according to report dated London, Aug. 28th, 1915, of Mr. H. R. MacMillan, the Special Trade Commissioner sent to England recently by the Department of Trade & Commerce, is to the effect that pitch pine was tried out along with other woods evenly, and was found not to wear, producing a rough pavement. Canadian Spruce was laid on the north side of Trafalgar Square, London, 12 years ago with an 8 lb. treatment of creosote oil and is yet in excellent condition, but with this exception, the whole of the wood block pavement laid in Great Britain now is Swedish and Russian Redwood (Pinus Sylvestris) which is closely analogous to our Canadian Norway. (Pinus Resinos).

3. Being a Canadian timber, should certainly be used in preference to imported timber.

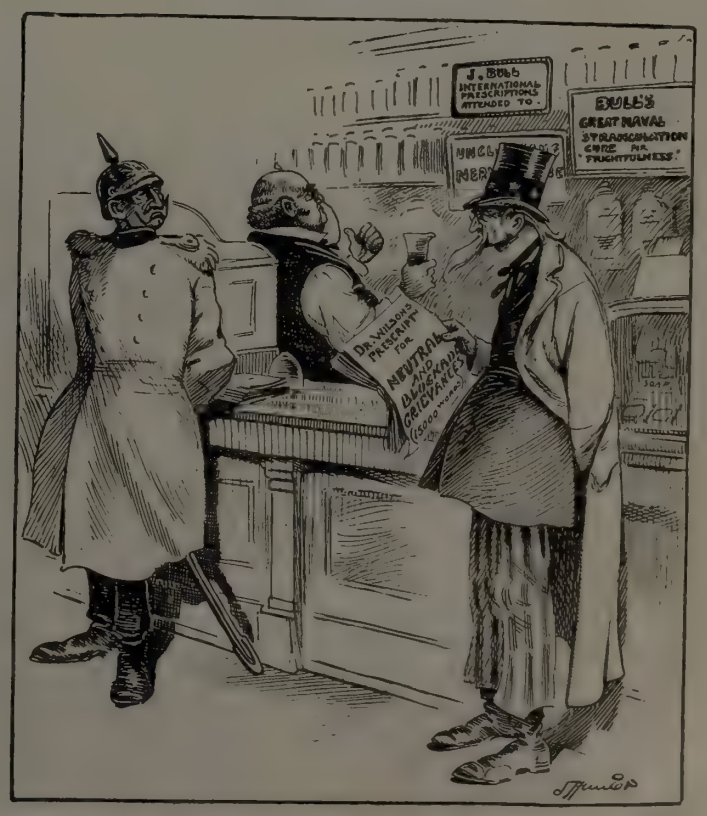
The Forestry Branch of the Department of the Interior, Ottawa, have issued Bulletin No. 49 dealing with Treated Wood Block Paving, and are at present engaged in further investigation.

Shantymen's Christian Association Preparing for the Winter

Mr. Wm. Henderson, superintendent of the Shantymen's Christian Association, recently returned from England, where he spent a year in very interesting work under the English Y. M. C. A., among the troops in England. Mr. Henderson has already resumed his work among the Shantymen of Ontario. He reports that in addition to the valuable experience gained through coming in close touch with thousands of men during the past year's work, he has secured a large circle of friends in Britain, whose help may be counted upon once the war is over. Since returning, Mr. Henderson has visited the workers in the north and reports that conditions are promising for the present season's work. Six experienced workers are already enlisting for the season, and it is probable that others will be added if funds are available.

The Shantymen's Christian Association recently established a Rest Home and Work Centre near North Bay, on a farm given to them for that purpose. During the past year scores of wandering men to and from the camps have turned in at the farm and secured a meal or lodging. Those wishing to do so have remained for various periods from a few days to a few months, working for their board and clothes. The home and the farming operations are in charge of Mr. and Mrs. Baird, who are making a success of it from a practical farming point of view.

Must Await his Turn



Druggist Bull—Just in a minute, Sammy, just as soon as I gives this 'ere gent 'is straffing drops.

(Reproduced by courtesy of the Toronto World)

The National Steel Car Company, Ltd.

One of Canada's Greatest Industrial Institutions—Description of Plant and Output—Rapid and Substantial Growth of a Young Industry

The growth and development of Canada's railroad systems, which has been both rapid and continuous for many years, has led to the establishment of numerous great plants throughout Canada for producing equipment and rolling stock. From time to time it has been found that the existing plants are not sufficient for the production of the necessary equipment and rolling stock, and new plants have been springing up in many parts of the country. One of these, the National Steel Car Company Ltd., whose plant is at Hamilton, Ont., is typical of this remarkable industrial growth.

The National Steel Car Company Ltd., was incorporated in July 1912, with a Dominion charter, the head office being at Montreal in the Transportation Building and the executive and operating office at the plant in Hamilton. The authorized capital stock of the company is $6,000,000. The paid up capital amounts to $3,500,000. Even before the completion of the plant the company had an order for 1,500 box cars, and shortly after the commencement of operations, other large orders were received.

The plant consists of two large buildings; the main shop in which are located the steel and wood working plants; and the paint and shell shops. The main shop is 680 feet in length and 200 feet in width. The paint and shell shop is 250 feet by 144 feet. In addition to these buildings the plant includes a power house, dry kiln, dry kiln storage, paint mixing and storage, emergency hospital, gate house, time office, and general office building.

Layout of the Plant

The two main buildings are of steel construction of the monitor type. For a height of 8 feet above the ground the walls are of hollow fire-proof tile, and above this they are fitted with continuous steel sash. The main shop is divided into three great aisles, two of 75 feet and one of 50 feet in width. In the latter are located the truck shop, machine shop, forge department, tool room and air brake shop. In the centre aisle, 75 feet wide, are located the large shears and punching machines. The steel construction and steel erection work are carried on in the opposite end of this aisle. The remaining aisle, 75 feet wide, is occupied for one half of its length by the planing mill, in which all the wood-working necessary on car construction is milled and otherwise prepared. The other half of this aisle is devoted to the wood erection department, where all the woodwork, after being machined is erected into the proper places on the steel frames of the cars. After passing through the wood erection department, the cars are shunted into the paint shop which is about 300 feet south of the main shop and has accommodation for 60 cars. There are 10 tracks in this shop and cars are distributed upon them by means of a transfer table, arranged to operate much after the manner of a railroad turn table.

The steel and lumber yards are served by a 10-ton travelling crane, the runway of which is 520 feet long. By this means the heavy materials are easily and quickly loaded and stored to the best advantage. There is also a system of industrial railroad tracks through the yards permitting material to be transferred by small trucks or by the standard gauge locomotive operated by the company.

The Car Construction Process

The construction of cars is a continuous process; starting in the truck shop with the boring of wheels and axle turning and then the assembling and construction of the trucks. The completed trucks are shifted across the shop on an industrial truck to the construction track and a steel underframe is placed across them by means of a crane. After the underframes have been bolted and rivetted into position the car is shifted to the next gang to set up and rivet together the sides and ends. Rivetting operations throughout the shop are carried on by pneumatic rivet tools. After the cars leave the steel erection department they are shunted over by means of the transfer table into the wood erection department, where the wooden sides, ends, floor and roofing are put on and made tight. This part of the work requires great skill as the cars have to be so constructed that they will hold grain and keep it free from rain and damp. In the woodworking department every modern type of machine required for this work is included. Each machine is equipped with large suction pipes for removing dust and shavings which are carried through a pipe system into the boiler house and then used as fuel. A large proportion of the machines used in this plant were made in Canada, many of them in Ontario.

The first car turned out by this company was completed about the middle of December 1912, and the first shipment was made in January 1913, a remarkable record when one considers that the first sod was turned for the erection of the plant just six months earlier. By August 1913, the company had an output of approximately 450 cars per month and a capacity for producing about 600 cars per month. Since then the capacity has been considerably increased as the organization became more perfect. In the seven months succeeding the production of the first car, the company raised its list of employees to the very creditable total of 900.

Throughout the plant, the tools and equipment are thoroughly up-to-date and provide everything essential to the economical and efficient production of railroad cars. Power for the operation of the plant is secured from a local company at Hamilton. The power house

Bird's Eye View of the Plant of the National Steel Car Company, Ltd., Hamilton, Ont.

however, is so arranged that the generation of power by the company could be quickly and easily provided for if found advisable. The plant throughout is heated by an underground system of ducts. Hot air is furnished by large steam radiators and is blown into these ducts by means of fans.

At the east end of the woodworking shop is located a store room for all small material used in the construction of cars and maintenance of the plant, as well as all small tools. The dry kiln is capable of handling 200,000 board feet of lumber at one time. All wood used in the construction of the cars is passed through this kiln before being worked up.

The office building, located on the east side of the shops, is two storeys high and of hollow tile construction. All of the operating offices of the company are here located, including the mechanical, engineering, purchasing, accounting and treasury, executive and photographic.

The company maintains its own emergency hospital and ambulance. In this hospital all injuries of a minor nature to the employees are treated at once. Serious cases are also given first aid before being taken to a regular hospital. Every possible care has been taken to safeguard employees against accidents. Notices are posted throughout the shops in three languages, cautioning employees about their work and instructing them as to how they should avoid accidents. All machines have been fitted with guards, and it is believed that this plant is on a par, so far as safety of employees is concerned, with any car building plant in the world.

Our illustrations include a bird's eye view of the plant at Hamilton, giving an excellent idea of its extent and location; and a picture of a logging car furnished by this company for the St. Lawrence Pulp and Lumber Company.

National Trucks

Another illustration shows a 3½-ton truck which is also one of the products of this plant. The National Steel Car Company are also turning out a 2-ton truck of similar specifications, and 1,500-pound and ¾-ton trucks. These trucks are specially interesting to lumber firms, on account of their efficiency for the delivery of stock. The chief specifications of the trucks are as follows:—

Motor—Waukesha, cast in pairs, 4 cylinder; bore, 4¼ in. and 4½ in.; stroke, 5¾ in.; valve diameter, clear, all models, 2 in.; connecting rod bearing, 2 in. x 2½ in.; gear end main bearing, 2 in. x 2 7/16 in.; centre end main bearing, 2 in. x 3¼ in.; fly wheel end, main bearing, 2 in. x 3½ in.; piston pin bearing, 1¼ in. x 2⅛ in.; camshaft diameter, 1¼ in.; timing gears, helical pitch, 10; timing gears, face, 1; S.A.E. spark plug thread, ⅞ x 18.

Transmission Company's own design, made by the Covert Mfg. Co. 2 and 3½ ton models, 4 speeds forward and a reverse. Transmission is placed midway between rear axle and motor.

Clutch—Enclosed dry-plate variety.

Ignition—Dixie Bosch or Eiseman, high tension.

Carburetor—Zenith. Control by hand throttle at top of steering post and by accelerator on toe board. Transmission control and emergency brake levers are in centre and steering wheel is placed to the right or left at the option of the purchaser.

Radiator—On both models of built-up type, having cast top, bottom and sides, enclosing fin and tube centre core. Directly behind the radiator is mounted an 18 in., high efficiency fan. Water is forced by a centrifugal pump. The radiator core is approximately 575 square inches, cross sectional area.

Steering Gear—Worm and nut, fore and aft type, made by Ross Gear & Tool Co. The trunion shaft carrying the pitman arm is of heat-treated, nickel steel, 1½ in. in diameter. The pitman arm is a special, drop forging. Hand wheel has aluminum spider 20 in. in diameter.

Front Axle—Timken 2 x 3 in. I-beam section.

Rear Axle—Timken, David Brown worm drive. The driving strain is taken through radius rods attached to rear axle and frame.

Springs—Semi-elliptic front and rear, of silico-manganese steel, self lubricated. Front springs are 48 x 3 and rear springs are 52 x 3. All spring-eyes punched.

National Truck Made by The National Steel Car Company, Ltd., Hamilton, Ont.

Wheels—Best oak of artillery design with squared spokes, 14 to the wheel. Front wheels 36 x 5; rear, 40 x 5, dual.

Tyres—36 x 5 in. front; 40 x 5 in. dual, rear; solid rubber and demountable rims.

Frames—High carbon, open hearth ship channel. Cardan shaft is tubular, made from seamless, drawn steel tubing of .35 carbon steel, heat-treated.

Equipment—Three Adlake pressed steel truck lamps, jack and a full set of tools.

All four models of the National trucks are designed from the most up-to-date specifications of designers of international experience. The rating of these trucks is on the English long ton. The two ton truck has a wheel base of from 13 to 13 feet, and the 3½ ton truck has a minimum wheel base of 13 feet or a maximum wheel base of 15 feet 6 inches. The turning radius of the National truck is very short, which is a decided advantage, especially for lumber trucks, and is obtained by placing the front axle 20 inches to the rear of the radiator. This gives the required length of frame for a long body, and yet retains a short wheel base. On the 3 ½ton truck there is a base of 15 feet 6 inches which makes it possible to turn in a radius 30 feet 6 inches. The maximum loading space on the two ton truck is 13 feet and on the 3½ ton truck 15 feet.

The chassis of the National Truck is so designed that the application of winches and other hoisting mechanism is greatly simplified. The steel in the National Truck chassis is of heavy design high analysis with a tensile strength of 140,000 lbs., and an elastic limit of 118,000 lbs.

The rear axle is equipped with the famous David Brown Worm Drive and is made by the Timken Company. Transmission is of large dimensions. The motor is of the L-Head type, and according to recent reports from the front the performance of this type of motor has been the most efficient of any in the army transport. So far as is possible the National Truck is made in Canada.

The National Steel Car Company Ltd., manufacture freight and passenger cars, gun carriages, logging cars and motor trucks, which are their chief products. They also make oil tank cars, field kitchens, motor ambulances, etc.

Executive and Operating Staffs

The present executive and operating staff of the National Steel Car Company Ltd., is as follows:—

President, Sir John M. Gibson, K.C.M.G., Hamilton; vice-president and general manager, Basil Magor, Hamilton; secretary-treasurer, Mostyn Lewis, Montreal; assistant secretary-treasurer, L. A. Rodger, Hamilton; manager of works, Peter F. McCool, Hamilton; assistant manager of works, E. C. McDowell, Hamilton; superin-

Logging Car made for St. Lawrence Pulp and Lumber Co., by the National Steel Car Company, Ltd., Hamilton, Ont.

tendent, Chas. R. Dillon, Hamilton; purchasing agent, W. E. Galloway, Hamilton.

The board of directors is as follows:—president, John M. Gibson, K.C.M.G.; Sir Henry M. Pellatt, C.V.O., Toronto; W. G. Ross, Montreal; C. H. Cahan, K.C., Montreal; R. G. Magor, New York City; Murray H. Coggeshall, New York City; Samuel King, London, Ont.; Mortimer B. Davis, Montreal; J. J. Scott, K. C. Hamilton; W. Kirkpatrick Brice, New York City; Basil Magor, Hamilton; general counsel, H. A. Lovett, K.C., Montreal; transfer agents and registrars, Corporation Agencies Ltd., Transportation Building, Montreal; Depositaries, Bank of Hamilton, Hamilton, and American Exchange, National Bank, New York City.

Lumber Philanthropist Passes Away

Death of M. F. Rittenhouse of Chicago and Vineland, Ont.—A Noble and Successful Career

The death occurred at his home in Chicago on November 7th, of M. F. Rittenhouse, a man who made his business career in the United States, centering at Chicago, but who will always be one of the outstanding personalities in the history of the citizenship of Canada.

Moses Franklin Rittenhouse was born in Vineland, Ont., on August 12th, 1846, and throughout all the busy years of his life he bore in his heart a deep affection for the land of his birth. Each year he paid many visits to Vineland and was a great benefactor to its people. He endeared himself greatly to all with whom he came in contact. He was a keen business man and a broad minded, whole-souled philanthropist.

At the age of 18 he went to Chicago, which already at that time was a fair sized lumber market. There he secured employment in B. F. Hand's planing mill, and during the first week he received $3.50 as his wages. His services, however, were considered to be more valuable and during the second week his pay was raised to $4.50. Then he made another advance by securing a situation in the office of the Morning Post, where he performed the duties of printer's devil. A month of this work convinced him that he would prefer the lumber business and he then secured a position with Giese and Cantine, lumber inspectors. Before the close of navigation that year he went to the Peshtigo Company, a large manufacturing concern in Wisconsin, with distributing yards on the North Pier in Chicago. Soon he began to see the necessity for a broader education, and after a few months he returned to Canada to attend school during the winter.

In the spring of 1865 he went again to Chicago and secured a position with McMullen, Funk and Company. A year later the firm name was changed to McMullen and Officer, and Mr. Rittenhouse was promoted to the management of the branch yard at Lake and Jefferson Streets.

In December, 1866, he again decided to improve his education, and during January, February and March, 1867, he attended a business college, where he received a diploma as bookkeeper, which he followed by obtaining a position with B. L. Anderson and Company, wholesale lumber dealers. His next change was in April, 1868, when he went to J. Beidler & Bro. This was the last change for fifteen years. From that date until April, 1883, he was associated with this firm and its successor, the J. Beidler & Bro. Lumber Company, rising from the position of salesman to that of general manager. The concern was incorporated in 1871 and Mr. Rittenhouse was made treasurer, a position which he occupied for twelve years.

On May 1st, 1883, Mr. Rittenhouse severed his connections with his associates and opened an office and yards with the late Jesse R. Embree, under the style of Rittenhouse and Embree. This firm made rapid and solid progress, and was succeeded by the Rittenhouse and Embree Lumber Company. In 1901 Mr. Rittenhouse formed the Arkansas Lumber Company of Warren, Ark., a large yellow pine manufacturing institution of which he was president. This corporation bought a sawmill and timber lands and has since added steadily to its timber holdings and sawmill properties. Mr. Rittenhouse was also interested in many other important industrial and financial institutions.

It would be impossible to more than outline the many-sided interests of Mr. Rittenhouse's career and his extensive charitable and municipal benefactions. Probably his greatest interest in life was the development and improvement of his birth place at Vineland. In 1886 he founded the Rittenhouse Public Library at Vineland, which has been added to several times through his generosity, and now comprises several thousand volumes of well assorted standard literature and is known as the Rittenhouse school, library and Victoria Hall. He also donated an experimental farm to the Province of Ontario which has been brought to a high state of educational efficiency. A year ago he started the building of a floral boulevard at Vineland, reaching from the station to the lake, a distance of one mile. On either side of this driveway are rows of trees beneath which are wide reaches of trimly kept sward with beds of flowers at intervals.

In all, Mr. Rittenhouse spent several hundred thousand dollars upon the improvement of Vineland, and his name will always be revered by the citizens of that fortunate district.

The remains of the late Mr. Rittenhouse were brought from Chicago to Vineland for burial, and were interred in a plot of ground near the old cemetry, in a new cemetry which Mr. Rittenhouse commenced to have constructed last spring.

As an indication of the great esteem in which Mr. Rittenhouse was held by everyone who knew him, we reproduce the quotation which was used as an introduction to his obituary by the American Lumberman of Chicago:—

"To have endured early hardships with fortitude and overcome difficulties by perseverance; to have founded a large business, useful in itself, and giving employment to many; to have achieved position, fortune, independence and influence; to have given largely of money to charity and of time to citizenship; to have established a character above reproach; to have acquired the admiration, the confidence and the friendship of his fellows; and to have gained all these of this world, without losing the soul by avarice, or starving the heart by hardness! The man who has so lived has nobly lived and he should find peace and satisfaction when the shadows begin to lengthen, and the evening of life draws on."

E. B. Foss Killed in Automobile Accident

A private telegram received in Toronto on November 29th contained news that Mr. E. B. Foss, of Bay City, Mich., widely known as one of the large operators upon the North Shore of Georgian Bay, Ont., was killed in an automobile accident on November 26th. This news will be received with widespread regret in Ontario, where Mr. Foss had extensive business relations. The late Mr. Foss visited Toronto on November 24th in connection with business and then proceeded to Bay City, where the accident occurred.

Mr. Foss and Mr. Jos. Misak, president of the Pilsen Lumber Company, Chicago, were crossing the railroad tracks at Bay City when they were struck by a train backing up. Both Mr. Foss and Mr. Misak were killed.

The late Mr. Foss was head of the long established firm of E. B. Foss and Company, Bay City, Mich., and operated in Northern Ontario under the name of the Hope Lumber Company, at Thessalon, Ont. His company had recently purchased the plant of the North Channel Lumber Company at Thessalon.

B. C. Sends Special Lumber Commissioner to Europe

The heavy orders for lumber for the United Kingdom placed through the B. C. Government during the past summer as a result of the visit of Lumber Commissioner H. R. MacMillan to Europe show what results can be obtained by Governmental action in assisting the lumbering industry. In order to follow up the advantage already gained in this new line of work the Hon. W. P. Ross has announced that the Provincial Government is sending a business representative of the industry to London.

Investigation has already shown that before the European market can be entered, on any scale, by B. C. manufacturers a great deal of preliminary work must be done in explaining to buyers the qualities and methods of manufacture of British Columbia woods. There are many misconceptions which are very prevalent and which act as a barrier to the introduction of B. C. lumber products. These can only be overcome by energetic personal work among the buyers by a representative thoroughly conversant with every phase of the lumbering industry in B. C. Again, there are many trade requirements which are designed to meet the case of Swedish and Russian lumber, but which are not properly applicable to the very different timber species of the Pacific Coast. In many such cases slight modifications of the customary specifications would not affect the interests of the Old Country buyer in any way, while they would cheapen production in B. C., and so enable the saw mills of British Columbia to quote lower prices and secure a larger share of this trade. Through general work of this character the Provincial Lumber Commissioner will be of considerable assistance not only in preparing the way for future developments but also by co-operating with the various brokers and agents who represent the interests of British Columbia lumber firms now doing business in the United Kingdom markets. So active has been the campaign conducted by United States shippers, and so largely have they increased their representation in Europe recently that the Minister of Lands has decided that a strong effort is necessary to counteract this action and protect British Columbia business.

Mr. J. G. Woods, the well-known lumberman, has been appointed as the new Lumber Commissioner to the United Kingdom. Mr. Woods has been long and intimately connected with the lumber business of the Coast. After being manager of the Leamy and Kyle Company, one of the first mills established at Vancouver, he became man-

ager of the Moodyville Sawmills, and was for many years engaged in the cargo export trade, an experience which is of particular value in view of his present mission. Mr. Woods was subsequently owner and manager of the firm of Woods and Spicer, shingle manufacturers. He thus brings to his task a thoroughly practical knowledge of all branches of the industry whose interests he will further in the European market. The new Commissioner's duties also include the carrying out of various arrangements made with the British authorities in connection with the lumber orders placed through the Department.

A New Lease of Life in the West

Lumbering Industry Stirred from the Yard to the Camps by the Farmers' New Demand for Building Materials

"Thousands of people, walking the streets last winter, are working at high pressure from the Rockies to the coast because Alberta farmers, with grain checks in hand or wheat in granary, are thinking in terms of lumber," says an interesting report in a Calgary paper, which continues as follows:—

"The grain yield in the province has simply resurrected the lumber industry, which, slack before the war broke out, almost gave up the ghost when the gauntlet was finally thrown down in Europe.

"The lumber business has already been stimulated from 50 to 75 per cent., according to various reliable authorities, because granaries, new houses and repairs have entered largely into the plans of the farmers, with the certainty of good prices for their grain. This spring all lumber firms in the city are anticipating such a rush that it will be like the boom times.

"The farmers, it is stated, are preparing to set aside tens of thousands of dollars out of their nice little profits to invest in lumber, according to a prominent lumber man. All the necessary work that has been saved up because of hard times, will be done with a return of confidence and the jingle of cash in hand. On top of that, such has been the return from the crop this year, many farmers intend converting their shacks into substantial houses.

The business anticipated is no ordinary one, and in preparation for it, the lumber mills of the adjoining province from Nelson to the coast are already working under forced draft, and will increase in momentum with the passage of winter. Behind them, deserted logging camps are awakening to life after two years' somnolence.

"You can't imagine what effect the circulation of that money will have on the community generally," said one lumberman. "It will be split up between the retail lumber men in the smaller centres, the central offices of the big lumber companies in the city, the mills and the lumberjacks. I can see nothing else for it but such a rush of business as will keep all the hands that can be procured at high pressure for months.

"It may be hard for the man who has absorbed all the blue news from the Balkans lately to realize, but there is an actual shortage of men already in the lumbering field.

"The chief scarcity exists among the lumberjacks because so many of them, idle all last winter, have enlisted. The trade of lumberjack requires a certain amount of technical knowledge.

"The outlook, so far as business is concerned, could not be brighter. The city itself will benefit enormously through the revival, even though there may be an utter absence of building acticity in the city itself.

"We don't look for trade in the cities, but the country points will be simply throbbing with life from now on, and upon the prosperity of these depends in large measure Calgary. The lumber revival is only one indication of the rising of the tide of prosperity.

"Scores of trainloads of lumber have already arrived on the prairies from the mills, and these are being scattered throughout the several hundreds of small towns where the demand is arising.

"Record logging operations have been accomplished in the coast district, directly due to the crop in Western Canada.

Mr. A. B. Cushing, of the Cushing Lumber Company, estimated that business had picked up at least 50 per cent. during the past two months.

"And lumber dealers are preparing for a big increase next spring," he said. "We don't expect very much from the city. We rely absolutely upon the country. Stocks at country points have been getting light since the rush of building stopped. These stocks will have to be renewed to meet the expected demand. Dozens of farmers contemplate the erection of new houses out of the proceeds of this year's bountiful crop.

In view of this, lumber mills at which not a single wheel turned last winter will be running full tilt this year. There will be a lot more logging done, and to illustrate the activity that is already beginning, it is difficult to get the necessary help now."

The Riverside Lumber Company alone has two mills going at high pressure, and its logging camps are fully manned. All told, about 350 men are employed, whereas both logging camp and mill were deserted last winter.

"There has been a fine rush of business during the past two years," said Manager Sereth, "and the prospects are very good for the coming spring. Stocks are very low on the prairies. Mills are already beginning to work full time, from the Rockies to the coast.

"Men are hard to get already, for the occupation of lumberjack requires some technical skill to perform. A big percentage of these men who were idle all last winter have enlisted. I firmly believe that the big rush will set in either late in January or the beginning of February, and that the lumber business of the province will take on an absolutely new lease of life."

Douglas' Egyptian Liniment for the Camps

A most essential article for lumber camps to keep in stock, isolated as the large majority are from the services of a veterinary surgeon in case of accident to the horses, is a good standard liniment. One of the best known brands on the market and one which has been widely known and used by lumbermen throughout the country is Douglas' Egyptian Liniment put up by Douglas & Co., of Napanee, Ontario, and which has been on the market now for over twenty-five years. There are many liniments on the market with their particular applications for different troubles, but the makers of Egyptian Liniment claim that this is the only liniment that will stop bleeding immediately. This in itself is a strong reason for keeping it in every stable. It is also claimed to be a rapid cure for thrush, sprains, curbs, splints, callouses and sprains. In their advertisement elsewhere in this issue the manufacturers offer to send free to any lumberman a generous sample of this well known liniment.

Mr. Jules Ayer, managing director of Charles Boss and Co., Ltd., London, Eng., the English agents of the Bennett Lumber Company, Montreal, has been on a brief visit to Canada, looking into the general lumber position here. His firm have handled a very large amount of Canadian spruce this year, through the Bennett Lumber Company, and the figures of the season's exports will show that the latter are among the principal shippers from the port. Their business has only been started since the war. After a short stay in Montreal Mr. Ayer left for Boston, from there he went to New York on his way home.

FIR TIMBERS

WE CAN SUPPLY ANY SIZE AND LENGTH

Wire your enquiries at our expense to

McDONALD LUMBER CO., 717 Union Bank WINNIPEG, MAN.

Mill—VANCOUVER, B. C.

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Wanter to buy Cedar Ties. Apply Box 269, Canada Lumberman, Toronto. 23-1-2

Wanted to buy 1-in. cull Basswood and 1½-in. good Basswood. Apply Box 270, Canada Lumberman, Toronto. 23-1-2

Wanted

10 cars 2-in. Hard Maple or Birch Common and Better. Apply Box 258, Canada Lumberman, Toronto. 22-1

Wanted

Birch and Soft Elm 1 in. to 4 in. dry or new cut. State quantity and full particulars. The London Lumber Co. Ltd., London, Ont. 22-1

Wanted

Several cars 4/4 x 4 in. and wider, 4 ft. and 5 ft. D and Better White Pine Shorts, rough. Wolf-Lockwood Lumber Co., Grand Rapids, Michigan, U.S.A. 23-24

Wanted

500,000 ft. or any portion 4/4 dry White Pine, Box grade, for immediate shipment to Boston, Mass. Widths to run 5 inches up, and lengths, 8 to 16 ft. Box 268, Canada Lumberman, Toronto. 23-23

Wanted

100,000 Cedar Ties.
1½ in. and 3 in. Maple, Beech and Birch Lumber.
2 and 3 in. Soft Elm, 2 in. Rock Elm.
Dry or new cut. State quantity you can supply, and when.
Box 250, Canada Lumberman, Toronto, Ont. 21-24

Wanted to Buy

15 million feet White Pine, Red Pine, Spruce, and Hemlock. Also Lath. Box 259, Canada Lumberman, Toronto. 22-1

For Sale–Lumber

Lumber for Sale

100,000 ft. Spruce 5th quality and better, 3 x 3 8/14 ft. $15 per M. ft. 50,000 ft. Spruce and Hemlock Culls, 1 & 2 3 x 3 at $12.50.
One Million No. 1 & 2 1¼ in. cull Lath at $1.50 on cars Manseau Savoie & Co., Manseau, Que., on I. C. R. 22 1

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber. Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

175,000 No. 2 White Pine Culls. Anxious to move this stock promptly. Box 267, Canada Lumberman, Toronto. 23-23

For Sale by Tender

75 acres, more or less, of valuable Hardwood Bush, containing Chestnut, Elm, Ash, Maples, Birch, Black Cherry, &c. Convenient to C. P. Railway. For particulars apply to owner, J. L. Davies, R. R. No. 1, Strafford-ville, Ont. 23-23

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.

GEO. C. GOODFELLOW,
c Montreal, Que.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra. Minimum charge 25 cents

Thoroughly experienced lumberman in all branches from stump to consumer wants position with wholesaler or manufacturer. Box 261 Canada Lumberman, Toronto. 22-23

Position as superintendent or foreman in box factory; 30 years experience; experience in making shell boxes. Box 266, Canada Lumberman, Toronto.

For Sale–Machinery

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

Machinery For Sale

One 150 h.p. Stationary Engine; two 75 h.p. Tubular Boilers; two Resawing Machines (with Circular Saws). Savoie & Co., Manseau, Que. 22-1

For Sale

Log Hauler, built by Alex. Dunbar & Sons; also several sets of sleighs. Address:
DENASTON BREAKEY,
Breakeyville,
21-24 Co. Levis, P. Q.

For Sale

Logging Equipment
R. R. Locomotive
Logging Sleighs
Snow Plows
Hoisting Engines
Chain, etc.
Box 257, Canada Lumberman, Toronto 22tf

Machinery For Sale

1 Boiler 72 in. x 14 ft.
1 Boiler 52 in. x 14 ft.
1 Boiler 48 in. x 14 ft.
1 Jack Ladder Chain 300 ft. long.
1 Horizontal Engine complete with driving pnlley. Box 271, Canada Lumberman, Toronto, Ont. 23-24

Saw Mill Machinery For Sale

Second-hand Machinery for Complete Saw Mill, all practically new, in excellent condition, including Bullwheel, Steam Kicker, Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8-ft. Waterous Bandmill, 5-saw Slab Slasher, 48-in. Edger, Trimmer, also Independent Lath-mill, and Filing Room outfit. Power Plant complete. Offers accepted for all or any part. On view at the Waterous Engine Works Company, Brantford, Ont. t.f.

Business Chances

Wanted

Practical Sawmill Man with four to five thousand dollars to invest in small mill cutting twenty-five thousand feet of Spruce lumber per day, located within one hundred miles of Edmonton, Alberta, on two Trunk Line Railways and fair sized lake. The very best of shipping facilities and a first class money making proposition. We have the mill and the timber and we want a good practical saw mill man to run it, who can invest some money. Address C. T. Nelson, P. O. Box, 1353, Edmonton, Alta. 23-24

How Belligerents Use Lumber

The Detroit Free Press prints the following interesting editorial on "The Future of Our Lumber Industry" as it is being affected by the European war:

"We who depend for our news of the war upon the narratives of those who visit the trenches must note the enormous consumption of lumber in the construction of the subterranean cities in which soldiers live and fight, stations frequently having sleeping quarters for a hundred men. Large areas which have been reforested have been denuded in the making of corduroy roads for the passage of artillery, the establishment of camps, the varied uses of the army—as in masking batteries from the view of aeroplanes by boughs, and the damage by shells. All this means a great destruction of forests; trees leveled by the axe in an hour have been years in growing and are not to be replaced save in process of time.

"Meanwhile, the export trade from America, which in normal times absorbs 10 per cent. of our total timber cut, is at a standstill. In the year ended June, 1914, France, Great Britain, Germany and Belgium took of us forest products valued at $24,230,731. There is a total cessation of this trade with Belgium and Germany, and statistics show that in May of the current year the value of our world exports in lumber, wood and manufactured timber was 4 per cent. of that of the same month in 1914. The lumber trade has in no way profited by the war; it has in fact been still further depressed by the cutting down of exports.

"An enormous capital is invested in the lumber industry, which is paying small profits at present. Prices are low; it is reported that even the small volume now moving is at rates so low that manufacturers do not get back the cost of production. Such conditions do not encourage lumbering or manufacture, but the millions invested demand some activity; competition and low prices tend to wastefulness in the forests and the mills.

"It would seem inevitable that at the termination of the war there must be a vastly increased demand for American lumber. The destruction of timber in the war zone, which extends pretty well over Europe at present, has been excessive. Military needs are independent of economics. When rehabilitation begins there should be five or six fat years for the American lumberman, who has certainly experienced the lean."

An Opportunity

Wanted—A young man who knows the practical side of the woodworking business and can express his ideas in writing, as Assistant Editor of trade journal; experience in construction work an advantage, but not essential. State full particulars and salary expected. Box 25, Canada Lumberman, Toronto.

September Exports from U. S.

During September of this year wood, lumber and other wooden manufactures valued at $5,300,000 were exported from the United States while in September, 1914, the value of these articles exported was only $4,000,000. During the nine months ended September 30, 1915, wood, lumber and other wooden manufactures valued at $40,300,000 were exported from the United States, while during the same period of 1914 these exports were valued at $65,300,000. In September, 1915, wood and its manufactures valued at $6,000,000 were imported into the United States, while in September, 1914, the similar imports were valued at $5,600,000. During the nine months ended September 30, 1915, wood and its manufactures valued at $43,300,000 were imported into the United States, while during a similar period of 1914 the same imports were valued at $46,700,000.

Definite Steps Taken to Develop B. C. Merchant Marine

At a meeting of the B. C. Manufacturers' Association held at Vancouver on November 16th steps were taken which are expected to result in the development of a merchant marine built, owned and operated in B. C. A special committee was formed to draw up a memorandum to be forwarded to the Hon. Robert Rogers to ascertain whether the support of the Dominion Government can be expected in connection with the proposal. The present plan is to form a company that will build two or three wooden ships. Subsequently it is hoped, with government guarantee of bonds, to locate an iron and steel industry at Vancouver which would be capable of building steel vessels. A further meeting will be held in the near future to arrange plans for the organization of the prospective companies. When these plans are complete it is proposed to hold a public meeting at which there will be present the Boards of Trade of the Province, and members of the Dominion and Provincial Governments. The matter will then be placed before the public for its support. The reason for deciding to construct wooden ships first is that it would be difficult to secure sufficient capital at first to finance the building of steel ships. The need for tonnage is so pressing at the present time, however, that a company may be formed to buy one or two vessels. It is thought that the building of wooden ships will be in the nature of a stepping stone to the establishment of a plant for the construction of steel vessels. Offers of co-operation have been received by two ship building firms in England and specifications for the construction of two steel ships are now being drawn up in England.

In connection with the proposal it was announced that on July 1st, 1914, an English company had been incorporated for which capital of $5,500,000 had been subscribed, for the purpose of establishing a steel-founding and ship-building plant at Burrard Inlet, B. C. This plant was guaranteed to employ 5,000 men within one year from the starting of operations. If the war had not intervened the plant would already have been in operation.

The lumber manufacturing industry in British Columbia, particularly that of the Coast, will never develop to more than a fraction of its possibilities unless a merchant marine owned in British Columbia is developed. The lumbermen therefore, who are the backbone of British Columbia's prosperity, ought to get behind this proposition and see that either it or some even more progressive plan is adopted.

One of the best informed lumbermen in B. C. upon this subject is Mr. Eric W. Hamber, managing director of the Hastings Mill, the largest lumber exporting plant in B. C. According to Mr. Hamber's opinion the problem of securing tonnage and of establishing for the province a permanent mercantile marine of its own is the greatest question now before the lumber industry. Great markets, he points out, are already in existence in Australia, South Africa and the Orient, and still larger markets are looming up in the United Kingdom and Europe, but the ships are lacking for conveyance to the markets.

"We have had enquiries within the past week or so," he said recently, "for large shipments of Douglas fir for China, Japan, Fiji, South Africa and the United Kingdom. There is no question about our ability to supply the lumber, but we cannot get the ships." Even after the war, the shortage of vessels would last for several years, because the submarine war had taken a heavy toll of vessels and because the pent-up trade and the requirements of commerce to build up the devastated countries of Europe would make enormous demands upon the world's shipping. If B. C. waited until shipping became normal again it would lose its greatest opportunity for marketing its timber.

"At the present time," Mr. Hamber said, "there is not a single vessel in the lumber carrying trade registered from B. C. in spite of the fact that ours is both a lumber producing and maritime province. We have to trust to foreign countries to carry our products across the ocean to our markets." The question was not of interest solely to the lumbermen. Vancouver itself was greatly concerned, because, with vessels owned in B. C. the greater part of the price paid for the transportation of lumber would go to Vancouver, instead of going out of the country as it does at present. Mr. Hamber pointed out that while there were a few lumbermen who were financially able to assist in the forming of a merchant marine the proposition was essentially one requiring Government assistance at its start. He would not favor Government ownership of vessels, although that would be better than having none at all. The shipping trade however, required individual initiative in order to carry it on with success. A government guarantee of bonds would probably solve the financial difficulty. Briefly, Mr. Hamber's views are that the welfare and future of the timber industry in B. C. are closely bound up with the question of obtaining ships, and there is an opportunity now for establishing a great and profitable enterprise which will in its turn mean a new era for the timber industry of B. C.

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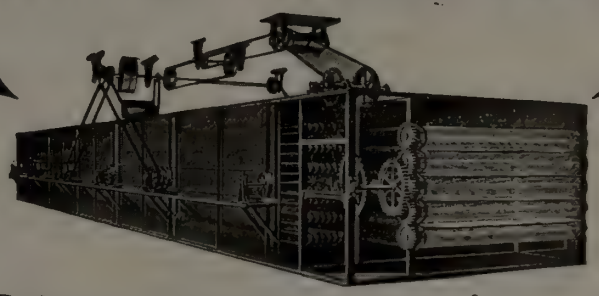

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Review of Current Trade Conditions

Ontario

Not for many months has the Canada Lumberman received so many encouraging reports from lumbermen in Ontario in regard to trade conditions, as during the past fortnight. Letters which have come to us from many firms indicate improved conditions. While the extent of the improvement is not great, it is unquestionable and is reported from all quarters. The shell box industry, the retail trade and wood consuming manufacturers are each responsible for a share in the improvement. In conversation with an Ontario manufacturer a few days ago we were shown figures of sales which indicate clearly that a steady improvement has set in. This firm's reports, covering the last three years show that with one or two exceptions its sales of lumber during the present year have been greater each month than during last year, in fact have been greater than during previous years of good trade conditions. This is partly to be accounted for by the excellent selling organization employed. At the same time it is an important indication of the fact that trade conditions in the lumber business may reasonably be expected, from now on, to show a steady improvement. Not only were the total sales in board feet as reported by this firm greater than in previous years, but their total cash receipts show similar advances.

Wholesale salesmen invariably refer to the present year as having been one of the stiffest they ever have experienced. It has been a hard up-hill fight for all of them and they will be glad when they can say good-bye to 1915. Nevertheless, all of those with whom we have been discussing the situation recently are of one opinion, namely that the volume of trade to-day is greater than it has been for some time and that in general the situation is encouraging.

The hemlock situation is still a difficult one to understand. In view of the advanced prices now being secured for Michigan, Wisconsin and Pennsylvania hemlock, and also the strong advances made in the prices of southern pine, one cannot help but think that Ontario hemlock should be bringing better prices than it is to-day. Although there is not much movement in hemlock, the actual volume of trade is no greater at the present low prices than it would be if these were advanced in a measure corresponding to advances in United States stocks. We believe that if the trade to-day would invariably put up the price of hemlock there would be no difficulty in securing the advance. Spruce and birch are still in strong demand on account of the extensive shell box production. Birch also in thicker sizes is in strong demand for gun stocks.

Eastern Canada

The wholesale trade at St. John, N. B., has shown improvement during the past fortnight. Actual prices have not advanced, but dealers report a better feeling. A greater volume of enquiries has been coming from the United States leading to the conclusion that conditions across the line are already much improved. New England mills have all closed down for the season. The mills at St. John are also closing one by one. In the third week of November only four St. John mills were still operating. The market for English deals is quiet. This is not because of any question of price, but on account of the high cost of ocean freight which is now 200 shillings per standard and practically no space is available even at that price. There would be a good demand if the stock could be shipped, as prices in Great Britain are firm and stocks are light. Winter liners will soon be shipping small amounts of stock. The local trade at St. John is very quiet. Lath are firm at St. John at about $2.75 per thousand on the wharf. The box trade continues very active.

Montreal trade is rather quiet on account of the decrease in building operations brought about by the approach of winter. The activity resulting from the production of shell boxes is also showing some decrease as the production is reported to be ahead of the requirements and the Munitions Committee is reported to have stopped taking delivery of the full output. Trade with the United States is keeping up well and has included several very large orders of late. The scarcity of space on ocean vessels brought the export season to a close at an exceptionally early date. The last shipments have now been sent across. The season has been a better one than was at first anticipated and the totals for the year are expected to show an advance over last year.

A further general advance is reported by manufacturers of eastern spruce in the States, base quotations on frames at Boston now being firm at $25. The demand is seasonable, but offerings are comparatively light. There is a good demand for random lumber at firmer quotations than a fortnight ago. Some manufacturers are insisting on $21.50 for 2 x 4; $20.50 for 2 x 3, 2 x 5 and 2 x 6; $21 for 2 x 7; $23 for 2 x 8; $24 for 2 x 10 and $24.50 for 2 x 12. The hemlock market at Boston is stronger. Several producers have advanced their prices on eastern boards clipped 10, 12, 14 and 16 feet to $21 in full car load lots. The hardwood market at Boston is well maintained as to quotations, but is not very active, with the exception of such stocks as are required for the manufacture of rifles. Shingles are not so active as other lines at Boston. Extra good white cedars are bringing $3.40 and less desirable extras are selling at 5 to 15 cents less. The range for clears is $2.85 to $3. Red cedar extras are bringing up to $3.50 for the best. There is a fair demand for lath and prices are unchanged.

Great Britain

The volume of trade on the spot market at London still continues very large and recently there has been quite an advance in the value of spot goods. In connection with Baltic stocks the advances have been so great recently that London buyers are showing an inclination to leave these stocks alone except when they become indispensable. The deliveries at London docks for the week ending November 6th amounted to 7948 standards as compared with 10,841 standards during the corresponding week of 1914. At Churchill & Sim's recent auction sale 3 x 11 third Montreal pine was sold at £22 5s. and ditto Quebec at £22. 2 x 9 unsorted Quebec spruce reached £19 5s., 2 x 8 brought £18 15s. and £18 10s. 7-in. and 6-in. sold for a trifle less. First-class fresh Quebec timber varied from 122s. 6d. to 100s. according to size, a rather low price considering the present high freights.

The c. i. f. market for spruce deals at Liverpool continues firm with a rising tendency. Recent transactions have been at record prices, but further advances of £2 or £3 per standard would not be surprising. The ruling factor of course is the high freight rate. The spot market also shows advances and further ones are likely. The consumption continues as heavy as ever, although spot sales at the advanced prices are not quite so easy to put through, unless the goods are badly needed. The trade in birch is rather restricted. C. i. f. values show little or no change. Importers are not showing much interest in stocks at present prices. Spot prices are unchanged, but a good proportion of recent arrivals has gone direct into consumption. Supplies recently have been a little heavier than the demand.

At Manchester, fresh record prices are being reported each week. Importers are able to obtain almost any price for their wares, provided they can make quick delivery. Spruce has been a feature of the market recently at the following ex quay prices:—3 in. x 11 in. £20; 3 in. x 9 in. £19; 3 in. x 7/8 in. £18; 3 in. x 4 in. to 6 in. £16 10s. to £17 10s. Floorings are following these prices at £17 15s. to £18 basis.

At Glasgow, there is no important change to report in the condition of the market. The volume of business is steady and of fair proportions. The principal source of consumption at present is Government orders, although there is a fair demand in other directions. There is an active movement in spruce in spite of the advance in costs. Recent arrivals have met with prompt disposal at record prices. Still higher prices are expected to come into force. There has been a good request for birch logs and planks and the available supplies are now greatly reduced.

United States

The situation in connection with the southern pine market continues to improve. Southern Pine Association reports show further increases in orders and in shipments, while the increase in orders is more rapid even than in shipments. For the week ending November 12th, for instance, orders were received by 148 mills amounting to 5,949 cars and the shipments reported during the same week were 5,313 cars. Unfilled orders on the files at the time of making this report amounted to 23,146 cars. The Association estimates that shipments during that week exceeded production by 21.28 per cent., orders exceeded production by 35.8 per cent. and orders exceeded shipments by 11.97 per cent. There is no question that the southern pine business is remarkably steady and firm. The car shortage is acting as a brake upon this business in general. There is not a very great shortage, but it is quite general, while in some sections, such as eastern Oregon, sawmills are closing down because of their inability to get sufficient cars. The shortage has been produced by the enormous interior movement of grain and by the holding up of cars at export ports on account of the shortage of vessels and of storage capacity.

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during October totalled practically $63,000,000 in value, which is to be compared with a little over $44,000,000 for October 1914. The building industry of the country is now fully up to normal. There is a good movement in northern and western pines. At Chicago a fair amount of trade is reported by contractors and by some of the factories. Country orders are calling for an immediate delivery. Prices are firm and the situation is strong. Stocks on hand are lower than a year ago. Much of the low grade pine is being consumed by the box trade. Stocks at United States northern pine mills are about normal and are in good condition on account of the favorable drying weather during October. Production has practically come to an end until spring and the situation is considered strong. There is a fair trade in northern pine at Buffalo, though it does not show improvement like some other lines. Prices are steady. Wholesalers are expecting higher prices in the near future. At North Tonawanda the market continues strong. Upper grades are moving a little more freely than formerly, particularly pattern stock. Prices are strong and slight advances have been made recently.

Better prices are being secured for hemlock in the United States. Mills report that dry stocks are scarcer. The hemlock situation is considered to be a favorable one. Some manufacturers have increased their prices to $3.50 off list. Slightly higher prices are reported from New York. Former lists have been withdrawn and yards are placing orders to-day at from $1 to $2 per thousand above a month ago. In the middle west hemlock has advanced about $1 a thousand. Pennsylvania stock has also been raised. Pennsylvania mills are shipping some of the most desirable sizes direct from the saw. Prices are expected to hold firmer.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

Wholesale Market Improved at St. John

St. John, N. B., Nov. 22nd. (Special to the Canada Lumberman): —A better tone has come into the wholesale market during the last ten days. Not altogether can there be said to have been an advance as far as dollars and cents is concerned, but a more optimistic feeling. The greater number of enquiries from the United States market which have come to hand during the past few days lead us to believe that there must be something doing across the line. We understand that the base price of schedule stock has increased upwards of $1.00 per thousand feet for 2 x 8 in., 20 ft. and down which are selling at $24.00 Boston rate. All the New England mills or those of Northeastern Maine are now finished for the season and cannot saw out any more stock.

The mills here are stopping operations one by one, only four mills being now in operation, viz., Stetson Cutler & Co., and Murray & Gregory and Randolph & Baker. No sales of English deals are being made at the present moment. It is not a question of price, but of how the stock can be moved. Freights are now 200 shillings per standard and no space can be purchased at that. If space could be had, the demand would be good, as prices on the other side remain firm and stocks are light. The winter liners are now beginning sailings from this port and no doubt some stocks will begin to move in a few days.

Locally business has flattened out and has very little life. The factories are running down to bare poles and short time. The outlook for factory work is not encouraging but no one can tell just what will happen these days. No doubt there will be little change as far as local building is concerned for the next few months. Laths have advanced to about $2.75 per thousand on wharves here. Box trade remains on the up grade with more orders than mills can take care of.

Montreal Trade Continues Quiet

Montreal, November 24th (Special to the Canada Lumberman): —If anything, trade in lumber is not quite so good as at the date of the last report. As winter is upon us, the demand for construction purposes is slow, and reliance has had to be put on orders for shell boxes. Unfortunately there are indications of a slackening in this direction. The number of boxes manufactured is ahead of the requirements of the Shell Committee, and in one instance, at least, making of boxes has been stopped. In other cases, the committee is not taking delivery of all the output, with the result that, unless there is a change, firms will have to cease making, owing to lack of storage facilities. Word has also been received that the Ottawa authorities are not giving out further orders for the present. The wholesale lumbermen thus find that the orders for lumber for boxes have fallen off, and that the outlook for the moment is not very optimistic. In spite of this, however, there is a generally cheerful feeling.

The attitude of the Canada Lumberman on the question of shell box contracts meets with general approval in the trade. There is a unanimous feeling that companies outside the industry ought not to have obtained orders to the exclusion of firms who are dependent upon this class of business for their living. Well equipped concerns in this city have found it impossible to obtain work from the Shell Committee while companies who have not the remotest connection with the lumber or woodworking interests were turning out thousands of boxes per week. At the time when many of the contracts were awarded, some box makers were short of ordinary work, owing to the general curtailment of commerce, and the receipt of war orders would have proved of great benefit to this branch of the trade. Instead of this, outsiders obtained large contracts, involving the equipment of new factories, certain box manufacturers meanwhile running on part time.

Business with the United States is keeping up very well, and some very large orders have recently been received.

Owing to the impossibility of getting space, the shipping season for the lumber trade closed at an unusually early date—the earliest for many years. The export firms have now sent over their last shipments, the exports being very light during the last month. The season has been much better than was at first anticipated, although exporters have found it particularly difficult owing to the uncertainty attending sailings and the question of available space. Rates, too, advanced from time to time, until they became almost prohibitive. The season's figures will soon be out, and these will no doubt show an advance upon the previous season's total. A Montreal firm has just booked space from St. John to London at 190s. per standard, and to Manchester at 200s.

Ottawa Trade Quiet—Shell Box Business Heavy

Ottawa, Ont., Nov. 24th (Special to the Canada Lumberman):—Attributed to the large orders of the militia department recently placed here for shell boxes, there has been a noticeable movement during the past fortnight in birch and pine. Several local firms have either filled or are handling at the present time orders of considerable size for these classes of lumber and anticipate an increased demand. Outside of these products, there have been slow but steady sales, and there have been few changes of any account in the price in the lumber market.

Lumbermen of Ottawa are becoming active and prominent in the recruiting campaign here and are doing everything to encourage their workmen to enlist. A recruiting campaign is at the present time being conducted on a vigorous scale to obtain men for the 77th Battalion. For this unit, Mr. J. R. Booth has undertaken to raise a platoon of fifty men from his own mills. A similar offer has also come from the E. B. Eddy Company of Hull, and a number of sections of twelve men each have been promised by other concerns. Both in the Booth and Eddy mills recruiting meetings have been held lately, and as a result of the movement of the Ottawa lumbermen, it is probable that the new regiment will be composed, to a large extent, of lumberjacks.

Plan Book Well Received by Farmers

Mr. N. G. Neill, secretary-treasurer of the Western Retail Lumbermen's Association, states that since the distribution of the Association's plan book, a little over a month ago, a large number of requests have come in from farmers for detailed working plans. The first farmer to write to the Association asked for plans for the most expensive house in the book and the second asked for plans for the most expensive barn. By the first week in November ten orders had already been received by the Association for plans for a single house. Mr. Neill further stated that in Saskatchewan many of the lumber yards had sold out practically every foot of lumber which they carried in stock. Thousands of granaries had been built, many farmers holding their wheat for a possible better price in the spring. The prospect for trade for the coming year appeared to him to be reasonably satisfactory.

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Holland Market Important to Canada

Piling for Houses and Timber for Canals and Harbors Used in Great Quantities—Douglas Fir Suited for the Work

The Weekly Bulletin of the Department of Trade and Commerce, in its issue for November 15th, contains an interesting report from H. R. MacMillan, Special Trade Commissioner, upon the lumber trade of Holland. Mr. MacMillan writes as follows:—

Dutch houses are built on piles 50-60 feet long, and 6-8 inches in diameter at the large end. The piles are white and red fir imported from the State forests of Germany and sold cheaply. The cost of building foundations for houses is so great that every possible saving is made in the remainder of the construction; with the result that the building operations of Holland only offer a good market for cheap woods used in general construction.

The only wood in a Holland house except the piling, is in the window and door frames, doors, joists, studding, rafters and battens, which carry the tile roofs and flooring.

The window and door framing, joists, studding, rafters and battens are in nearly all cases made of Swedish, Russian or German whitewood. Whitewood is preferred to redwood in Holland, whereas the reverse is the case in England. Whitewood for these purposes is in normal times sold at Dutch ports, in all the common dimensions and common grades, sufficient for over 90 per cent. of Dutch buildings, for £9 to £11 per standard, or $22.50 to $27.50 per thousand feet. Whitewood planks, 2 to 3 inches thick, 6 inches and up in width, and of a grade suitable for strong construction, are imported from Germany at a cost of 60 shillings per load or $24 per thousand.

Where the building is large and a span of over 30 feet is required, pitch-pine joists are used. These are in all cases sawn from the imported logs carried in stock by all Dutch timber importers. The ability of Douglas fir to compete in supplying joists will depend upon the feasibility of exporting Douglas fir logs at prices to compete with pitch-pine and will be referred to later. Practically no pitch-pine or Douglas fir is imported into Holland for general building purposes except in log form.

Flooring

Flooring throughout Holland is European whitewood (white spruce). The common dimensions are random lengths, thickness 1, 1¼ and 1½ inches, chiefly 1 inch, and widths 4 to 7 inches.

This flooring is dressed, but usually not matched and the quality is poor, any number of knots being admissable so long as it is sound. In the medium class houses, the flooring is covered with oilcloth or carpet. In more expensive private houses and hotels, hardwoods are used. Many tropical woods, e.g., teak, various mahoganies and excellent hardwoods for flooring, from the Dutch colonies, are cheap in Holland, selling for about 2½ and 4 shillings per cubic foot, or $50 to $80 per thousand, on a measurement that allows a very liberal overrun, estimated to be at least 25 per cent. Pitch-pine flooring is used occasionally in public buildings, halls and schools, but while it does not become more popular, a regular demand is maintained. It is imported in 1, 1¼, and 1½-inch thickness, width 4 to 6 inches, flat grain. either square-edged or matched.

The whitewood flooring in general use, sells at from $27.50 to $35 per thuosand, The use of pitch-pine flooring is not increasing, chiefly because pitch-pine prices have advanced in recent years. The only market for Douglas fir flooring will be in the grade of houses where pitch-pine is now used and it will only be accepted in competition with pitch-pine if offered at a lower price, until it has secured a hold on the market. The fact that Douglas fir may be purchased edge-grained will encourage its use.

Interior Finish

The common interior finish in Holland, in private residences and offices of all classes, excepting the most expensive, is spruce painted. In the expensive residences and offices, tropical hardwoods are used. Pitch-pine is used to a limited extent in schools, public buildings and churches. The pitch-pine used consists of the better grades sawn in the local mills from imported logs. It is valued in the wholsesale trade at $35 to $40 per thousand board feet for clear panels, ½ to 1 inch thick, 12 inches wide and four feet long.

Undoubtedly, merchants handling Douglas fir clears would be able to maintain a small but constant sale, particularly after the builders learned how to stain and polish the wood, something which they do not understand at present.

Timber for Canal and Harbor Works

Large quantities of timber are used each year in Holland to maintain the embankments, bridges, piling and locks of the 2,000 miles of canals, and for similar purposes in the extensive harbors. Two woods are used exclusively, hewn oak grown in the Dutch and German State forests, and hewn pitch-pine from the Southern States. The common size of pile is 65 feet long, 16 inches square at the butt and 10 inches square at the top. The usual price is 120 shillings a load for oak and 80 shillings a load for pitch-pine, equivalent to 60 cents a cubic foot (actual measurement) for oak and 40 cents a cubic foot for pitch-pine. The Dutch insist on having hewn timber and seem to believe that Douglas fir would be too soft for this purpose. All timber is creosoted before it is used. Sound knots and wane are admissable.

The price of pitch-pine is constantly increasing. Such inroads are being made on the oak forests of Europe for bridges and other purposes of war, that it will undoubtedly greatly increase in price. Douglas fir which was found in Belfast to be more satisfactory than pitch-pine for piling, will soon be accepted in Holland. If Douglas fir shippers can in normal times deliver piling in competition with the pitch-pine prices quoted they may expect to develop a permanent market. All piling now used is hewn.

Decking

Although Douglas fir decking has been for years extensively used in the neighboring German shipyards, it has not yet been accepted by Dutch shipbuilders. It may be regarded, however, as certain that the qualities which led to its use for decking in Germany will very soon lead to its adoption in Holland. Pitch-pine decking, flat grain, 3½-inch by 5-inch sells in Holland for 120 shillings a load or $48 per thousand.

Pitch-Pine Logs Imported

The pitch-pine logs imported are sawn square and are purchased by cubic measurement. The shipments are divided into two classes, those consisting of logs 6 to 9 inches square and those consisting of logs 10 inches square and up. The average shipment of the latter class averages 30 to 32 cubic feet per log and sells c.i.f. for 75 shillings per load of 50 cubic feet, or about 36 cents per cubic foot. The logs in the first mentioned class sell for 50 to 60 shillings a load or 24 to 29 cents per cubic foot. If an importer desires larger logs, he pays a higher price. By far the greater proportion of the imported logs are 30 to 32 cubic foot average.

The pitch-pine logs imported include long leaf, short leaf and other varieties. They vary very much as to grade, containing many knots and other defects. These logs are re-sawn by the local mills to order for the timber users of the country. The logs are carefully sorted and the product carefully graded. The handling of pitch-pine in this manner is familiar to the whole timber trade. It is further facilitated by the existence of a regular service of liners between the Dutch ports and pitch-pine ports, which make it possible for Dutch timber merchants to import pitch-pine logs in comparatively small parcels and secure a prompt delivery.

Douglas Fir in Holland

The Dutch merchants have been buying Douglas fir for years. Owing to the absence of a liner service between the North Pacific coast and Holland, they have nearly always been forced to accept large shipments, some of which have come around the Horn in sailing vessels and have not arrived in good condition. The average Dutch importer is therefore still slightly prejudiced against Douglas fir. He considers that it is not as strong nor as durable as pitch-pine, and that more difficulties and uncertaintities attend its purchase.

Owing in part to this prejudice against Douglas fir and in part to the fact that pitch-pine, thoroughly well-known, may be bought as cheaply, the use of Douglas fir in Holland is as yet restricted to few uses, such as large timbers, cribbing or framing in temporary structures and joists. When the price of Douglas fir drops below that of pitch-pine, as it must within a short time after the re-establishing of normal freight rates, a much wider range of uses will be developed for the timber. The present importation of pitch-pine into Holland is estimated at 12,000,000 feet board measure per year.

The Panama canal, even without a liner service, will do much to improve the position, both by shortening the time of transport and by reducing the freight rates.

When Douglas fir shippers can compete successfully in price with pitch-pine logs averaging 30 cubic feet each, they will be able to start an important trade, which will also assist them in marketing clears and merchantable boards and planks. There will be no prospect of selling any grades lower than export merchantable.

Much of the pitch-pine log trade to Holland is done in the form of deckloads in the winter time on vessels loaded below decks for British ports. There are no restrictions in Holland as to winter deck loads as there are in England.

Railway Sleepers

The supply of railway sleepers to Holland is an important business. There are 2,320 miles of railway for which 400,000 sleepers annually have been purchased in recent years.

It may be pointed out that when the usual supply of oak, Scotch pine, beech and larch failed this year, several hundred thousand pitch-pine sleepers were imported. A sleeper to sell in Holland in normal times must give twenty years' service when treated with a ten-pound per cubic foot charge of creosote. The railways buy their sleepers uncreosoted at 80 cents to $1 each for pine and larch, $1.20 to $1.40 each for oak and beech, 6.10 inch by 10.23 inch by 8.86 feet,

Shell Box Lumber

DRY BIRCH

WE have in stock approximately three (3) million feet of 4/4-8/4 and 12/4 Birch sawn during seasons of 1913-1914 and 1915. This is particularly suitable for manufacturing or Boxing purposes as it was sawn partially square and partially round or live edged.

We have extensive Kiln Drying, Resawing and Dressing Plants and can work to order.

DRY SPRUCE BOARDS

We carry the largest and best assorted stock in Canada.

Send us your inquiries.

John Fenderson & Co., Inc.

Sales Office:
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Saw Mills, Storage Yards and Planing Mills:
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allowing up to 2.16 inch wane on each of the upper corners of the sleeper. Since the outbreak of war, Dutch railroads have purchased large quantities of pitch-pine sleepers at about $1.60 each c.i.f.

The only way to sell to a Dutch railroad is through an agent in Holland, who will see to the delivery of the goods and the satisfaction of the many minor but essential requirements. The same principle applies to all timber business in Holland. The best way to reach this market is through an established agent or brokerage house. The greater part of the pitch-pine importations are sold to Dutch purchasers by English firms acting through Dutch sub-agents located in Rotterdam or Amsterdam. This arrangement does not mean an extra expense to the shipper, as the whole business is handled for the four per cent. commission and del credere common in the English market and on the same terms, including the essential one, that the Dutch purchaser will not buy unreservedly on Pacific Inspection Bureau certificate, but insists upon the right to arbitrate after goods are received.

Importance of Dutch Market

The Dutch market is one that will steadily grow in importance, not only because of the purchasing power of 7,000,000 prosperous people in Holland, but because a great part of the reconstruction of the Belgian and neighboring war zones will be handled through Holland. It is an important point, too, that Holland will take deckloads in the winter time. It is worth while, therefore, for any shipper or group of shippers in Western Canada, when making arrangements with selling representatives in England, to go farther and insure at the same time that a suitable sub-agent will be appointed for Holland.

The prices given in this report refer, without exception, to the c.i.f. prices ruling before the war.

On Thursday, November 18, a meeting of the technical section of the Canadian Pulp and Paper Association was held in Montreal, Dr. J. S. Bates, of the Forests Products Laboratories, presiding. Reports of committees on technical education, standards and methods of testings, collection of samples, &c., were submitted. Dr. Bjorne Jonsen, of the Forests Products Laboratories, read a paper on the chemical analysis of paper making pulps, while Mr. J. A. DeCew spoke on recent disturbances in the field of pulp and paper making supplies. The principal points were afterwards discussed.

The Situation in New Brunswick

Editor Canada Lumberman:— Nov. 1st.

Things are a little critical, so far as New Brunswick is concerned, at the moment, freights have increased rapidly and C.I.F. prices have not increased in the same proportion. We feel that sawn stock from New Brunswick will be required in England to the same extent next year as it was in the past, irrespective of whether the war is over, or still in progress, and that the F. O. B. buyers will have to pay about the same price for the stock here, and the English and French buyers will have to pay the prices, plus profit, insurance and whatever the freight rates may be. The latter is a great uncertainty.

The uncertainty of the market, however, is curtailing the lumber operations in this section of the country very materially, as some of the smaller operators are afraid to take chances on going into the woods. We know of several large firms also, who are curtailing their operations materially. —New Brunswick Manufacturer.

Editor, Canada Lumberman:— Toronto, Nov. 20th.

We find business greatly improved during the last month or six weeks, being 40 to 50 per cent. better than this time last year, but below normal of like time before the war.————.

Mr. Gavin Milroy, managing director of Turner Brothers Canada, Limited, Montreal, is making a hurried trip to Great Britain, necessitated by the greatly increased sales of "Turbros" Balata Belting and "Tower" Hair Belting, and the difficulty in securing materials. Mr. Milroy expects to be back in Canada early in the new year.

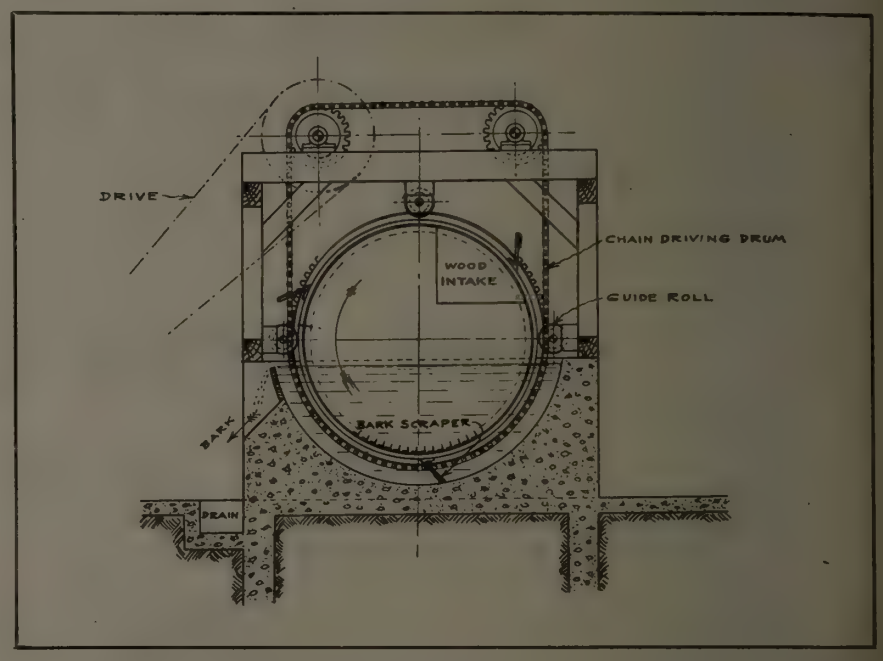
The Canadian Pacific and Grand Trunk Railways have offered 500,000 old railway ties for firewood, to be distributed among the poor of Montreal and the Council have voted $1,500, the cost of transporting and cutting the ties. Several large firms have also offered waste wood for the same purpose.

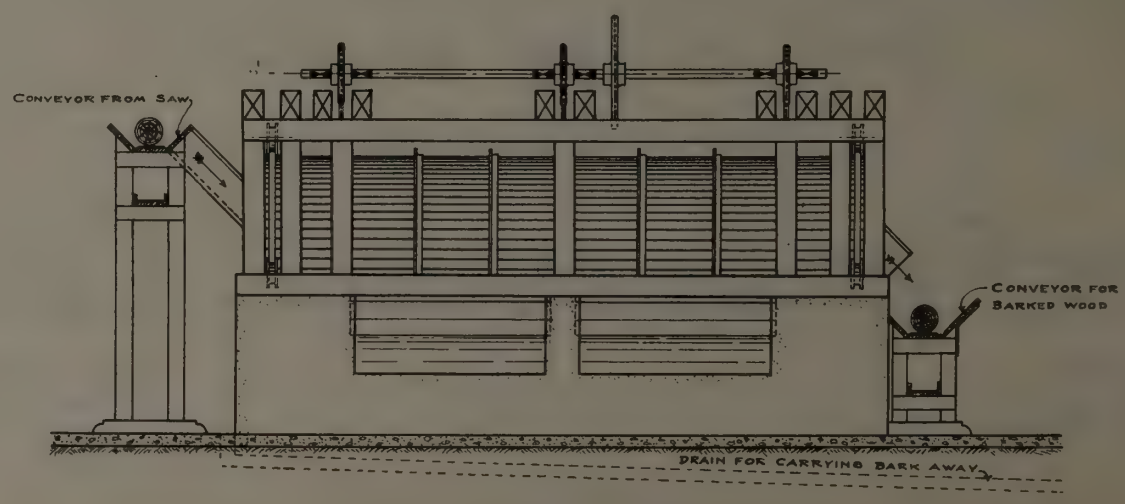
The Hardwood Manufacturers' Association of the United States will hold its annual convention at Cincinnati, Ohio, on January 18th and 19th, 1916.

A New and Important Barking Machine

The accompanying illustrations give an excellent idea of the American Barking Drum, which has recently been placed on the market by the American Barking Drum Company, 1471 South Michigan Avenue, Chicago, Ill. This machine is one which operates on a continuous process, thereby saving much time and labor, and only requiring one man to handle the wood as it leaves the drum. The operation of the machine does not have to be stopped to load or unload with wood or to remove the bark. The wood is not brushed on the end at all. It comes out of the drum as clean as a whistle with the skin removed and every particle of the wood remaining intact. All the bark is dropped into the vat under the drum and automatically carried therefrom by means of fork attachments, thereby discharging the bark separate from the wood at the side of the drum. The American Barking Drum will bark any kind of wood under any kind of circumstances. Its capacity is very large compared with the space it occupies.

Although the American Barking Drum Company have only had this machine upon the market a short time, they have closed a number of contracts, both in the United States and Canada and are receiving splendid letters of approval from their customers.





Diagrams showing construction of American Barking Drum.

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The Better Grade Qualities At Lowest Prices.

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Mackinaw Coats

BIRD'S Pure Wool Mackinaw Coats, as cut No. 1. Made with high seven inch collar, close fitting with tab at throat. Sizes 36 to 46.

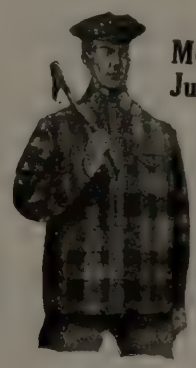
WOOD'S Pure Wool Mackinaw Coats, made as cut No. 1. Khaki, Olive, Green and Black. Seven inch notch collar.

BIRD'S Pure Wool Black Mackinaw Coats. Large shawl collar, loose belt with buckle. This coat is 35 inches long and has three large flap pockets.

Men's Mackinaw Knickers

MEN'S Mackinaw (Bird's Pure Wool) Knickers, as cut No. 7. Black shades only. Top and hip pockets. Strap or wool cuff. Very convenient and comfortable wearing. Sizes 32 to 44.

Cut No. 7



Cut No. 5

Men's Mackinaw Jumpers

MACKINAW Jumpers, as cut No. 5, for lumbermen and sportsmen. This jumper is to take the place of the old rolled neck sweater and is very much more serviceable. It is light in weight, buttons close up to neck and has many advantages over both coat and sweater.

Prices on Application

Smart-Woods LIMITED

OTTAWA - MONTREAL
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Jenckes Boilers

We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

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WHOLESALE LUMBER
SANS DIEU RIEN
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SPRUCE rough or dressed

1" No. 2 and Better Birch, 1914 cut
also Basswood, Hemlock and Pine

Saw Mills at
MONT LAURIER.

Dressing Mills at
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For Sale

Two Double Cylinder Hoisting Engines and Boilers, one with 7 x 12 and one 6½ x 8 Double Drum, with booms, cables and everything complete for loading logs. Used only two months, well kept and good as new.

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Hardwoods, Lath

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Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

J. R. Booth expects to be able to employ the majority of his workmen at Ottawa during the whole of the coming winter.

Nathan Calder, Listowel, Ont., is contemplating the erection of a planing mill to cost $5,000, 60 x 25 feet, brick construction.

E. Ketchabaw, Eden, Ont., is contemplating the purchase of machinery and equipment for a chopping mill and also for general woodworking purposes.

The sawmill, together with the lumber owned by Harry Richards, Balaclava, Ont., was recently destroyed by fire. The amount of the loss is not yet known.

Some time ago reports were published to the effect that the Mettagami Pulp and Paper Company intended to erect a large pulp and paper mill to cost $2,000,000 at Smooth Rock Falls, Ont. It is now reported that the company has decided to let this matter remain undeveloped until the money market becomes more favorable.

The Canada Hardwood Manufacturing Company, Limited, Deseronto, Ont., have started work upon an addition to their woodworking mill. They are making additions to the old mill building of the Rathbun Company and are also making minor alterations. Mr. G. A. Turner is the chief party interested. He will be purchasing sawmill and woodworking machinery, automatic lathes, belting, etc.

The Ontario Government which advertised some months ago that it would receive tenders for the right to cut pulpwood on an area situated north of the Transcontinental Railway west of Lac Seul and south of English River in the district of Kenora has rejected all the tenders that have been received, as they were not considered acceptable. It is probable that fresh tenders will be called for when times are more favorable.

Henderson's sawmill at Acton, Ont., was destroyed by fire recently. The loss amounts to about $4,000, and there was no insurance. Mr. Henderson will rebuild and expects to have his mill ready for operation in the spring. The stock of lumber, shingles and wood valued at between $12,000 and $15,000 was saved. It is believed that the fire was of incendiary origin. A mill on the same site, then owned by Mr. James Brown, was destroyed by fire fifteen years ago.

Eastern Canada

All the mills at Three Rivers, P. Q., have been closed down.

Fraser Limited, Fredericton, N. B., will take out about 8,000,000 feet on the Miramichi River this winter, according to a Fredericton despatch.

The Violette Lumber Company, Limited, are building a new saw mill near St. Flavie, P. Q., for the manufacture of lumber, lath and shingles.

The Partington Company, St. John, N. B., have a large crew in the woods on the Nashwaak River and will cut about their usual quantity this winter. They are building a dam on the Upper Nashwaak to facilitate stream driving operations.

The E. B. Eddy Company, Hull, P. Q., closed its sawmill for the winter early in November. The company states that it expects to keep its present complement of men employed in the pulp and paper mill, about 1,300 in all, at work throughout the whole winter.

The Brooklyn Lumber Company, Kentville, N. S., ceased operations early in November, after operating for a period of seven months this year and having cut over 7,000,000 feet. It is reported that the mill will be rebuilt and will not be in operation again for about nine months.

The Pejepscot Paper Company, Great Salmon River, N. B., report that their recent loss by fire amounted to about $50,000, which was fairly well covered by insurance. At present the company are not in a position to furnish details regarding the new sawmill, but have decided to rebuild next year. They may put up a temporary mill to cut the logs taken out of the woods this winter.

McElroy & Murchie, of Grafton, N. B., are lumbering extensively this fall and have made considerable improvements to their mill. Two large new boilers have been installed, in addition to a smoke stack 85 ft. high, two brick furnaces and a concrete fire house. The improvements will increase the capacity of the plant greatly and the firm are looking forward to a heavy sawing season next year.

The output of logs in the River Philip Valley, N. S., is expected to be considerably curtailed during the coming winter. A large quantity of logs cut last winter is still held by the operators, as vessels were so scarce this year that shipments to Great Britain were very light. Chas. Bragg who operated extensively in the River Philip Valley for many years has not yet

decided whether to operate. C. O. Black will put in a few men. Robert Baxter will operate on a smaller scale than usual.

At a recent meeting of the shareholders of the Laurentide Company, held in Montreal, the president stated that the Laurentide Power Company was now able to deliver sufficient power for the Laurentide Company and if necessary for the increased plant which had been under consideration for some time. The president of the company stated that the output of paper could now be doubled with an expenditure of a million and a half or two million dollars. It is considered likely that this will be undertaken before long.

Western Canada

The Prairie Lumber Company, Limited, Calgary, Alta., has been incorporated, with capital stock of $20,000.

The No. 2 shingle mill belonging to Councillor Fau-Vel, Burnaby Lake, B. C., was recently destroyed by fire.

The Bute Logging Company Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $10,000.

The planing mill of the Canadian Pacific Railway Company at Bull River, B. C., is being opened up and will probably be operated throughout the coming winter.

A report from Powell River, B. C., states that the Powell River Pulp and Paper Company is running at full capacity and employing more hands than it has ever employed before.

J. G. Moffat Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $50,000 to carry on business as timber merchants, lumbermen, sawmill proprietors, etc.

The British Columbia Match Company, Limited, has been incorporated with head office at Vancouver, B. C., and capital stock of $20,000, to carry on business as match manufacturers, timber merchants, etc.

A despatch from Vancouver, B. C., states that J. Hanbury and Company of that city have secured a contract for the production of 25,000 shell boxes, and the Vancouver Engineering Works a contract for 18,000.

The Mac and Mac Cedar Company Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $20,000 to carry on business as timber merchants and manufacturers of lumber, pulp and paper.

The Commercial Lumber & Shingle Company Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $10,000 to carry on business as manufacturers, timber merchants, sawmill proprietors, etc.

The Pitt River Shingle Company, Limited, has been incorporated with head office at New Westminster, B. C., and capital stock of $10,000, to carry on business as timber merchants, sawmill proprietors, and to buy, sell and deal in timber and wood of all kinds.

Wilson Brady, Limited, has been incorporated with head office at Vancouver, B. C., and capital stock of $50,000, to carry on business as lumber manufacturers, timber merchants, and to manufacture and deal in timber, sawlogs, lumber, shingles, lath, sash, doors, portable houses, boxes, and all articles and materials in the manufacture whereof timber, lumber or wood is used.

The Forest Mills of B. C. Ltd., and the Canadian Bank of Commerce, have brought suit against a number of leading fire insurance companies in connection with the loss which they sustained by the destruction of the plaintiff company's mill and yards at Compalix, B. C. The fire was made the subject of a government investigation recently and it was found that suspicion did not attach to anybody as having caused the fire. The companies sued include the National Fire Insurance Company, of Paris, France; the General Fire Assurance Company, Paris, France; Mercantile Fire Insurance Company, Waterloo, Ont.; Glen Falls Insurance Company, New York, and the Caledonian Insurance Company, Edinburgh, Scotland.

Large Crops Loosening Up Money

Mr. J. A. Campbell, superintendent of the Alberta Division of the C. P. R., states that in addition to the very heavy movement of grain, which is breaking all records, the lumber and coal traffic are also picking up remarkably well. For some time past people had almost ceased to buy lumber, and retailers had been allowing their stocks to grow very low. "The large crop is now having the effect of instilling confidence," he said, "and companies are ordering against the approaching demand. A considerable demand exists at present, as farmers are putting up granaries in many districts for the care of their abundant crops. The wheels of the lumber mills are thus beginning to turn merrily once more." Mr. Campbell added that the small towns were already beginning to feel the effect of the crops in a general loosening of the money situation. Grain was going through the elevators and grain cheques were coming back. The farmer was paying the merchant and the merchant would soon be paying the wholesaler.

PINE and SPRUCE

Dressed as Required, Spruce and Pine—1914-15 cut.

Merchantable 1 x 4 x 10/13
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all can be P. 1 or 2 S. and matched.

V Joint or Novelty Siding. Approximately 60 to 75 per cent. 12/13 ft.

Roofing P 2 S & Matched—1914 cut.

1 in. x 4 in. up x 8/13. Approximately 60% 12 and 13 ft.

First Quality and Clear Spruce

1 x 4 in. up x 6/13—'15 cut.

Cull Spruce—1914 cut

3 in. x 4 in. up x 10/13 3 in. x 9 in. x 10/13

60% Sawn May and July, 1915.

200 M. ft. 50% Best End of S. C. Pine, 1 x 4/6 x 6/11
175 M. ft. M. C. Pine 1 x 4/7 x 12/13
350 " " " 1 x 4/7 x 14/16
200 " " " 1 x 8up x 12/13
600 " " " 1 x 8up x 14/16
200 " " " 1 x 12 x 6/11
250 " " " 1 x 12 x 12/13
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All F.O.B. Cars or Boat Ottawa.

1,000,000 pcs. Mill Run Spruce Lath 4 ft. x 1⅜ x ⅜—'15 cut.
500,000 pcs. No. 2 & 3 W. Pine Lath, 4 ft. x 1¼ x ⅜—'15 cut.

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Prompt shipment. Satisfactory stock. Good service. Write for Prices.

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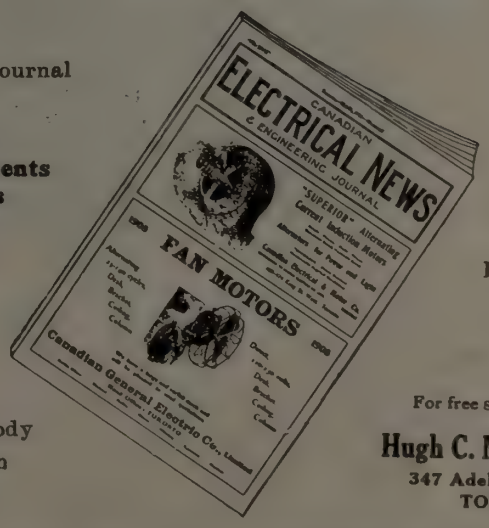

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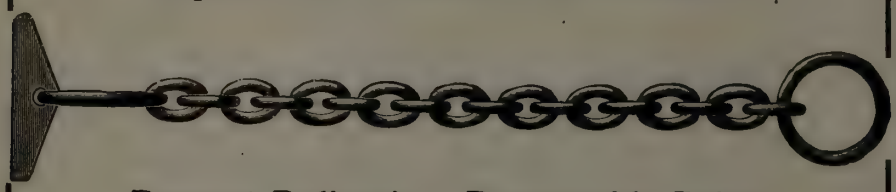

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Address communications to Columbus

New **RAILS** Relaying

12 to 80 pounds per yard.

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58 Front St. West, Toronto

Cheapest Sweetener You Can Buy

is delicious "Crown Brand" Corn Syrup

Cheaper than sugar for making pies and puddings and serving with porridge.

Cheaper than molasses for baked beans, and on pancakes and hot biscuits.

The men will enjoy this famous table syrup, too—with its rich, delicious flavor.

Write your supply house for prices on

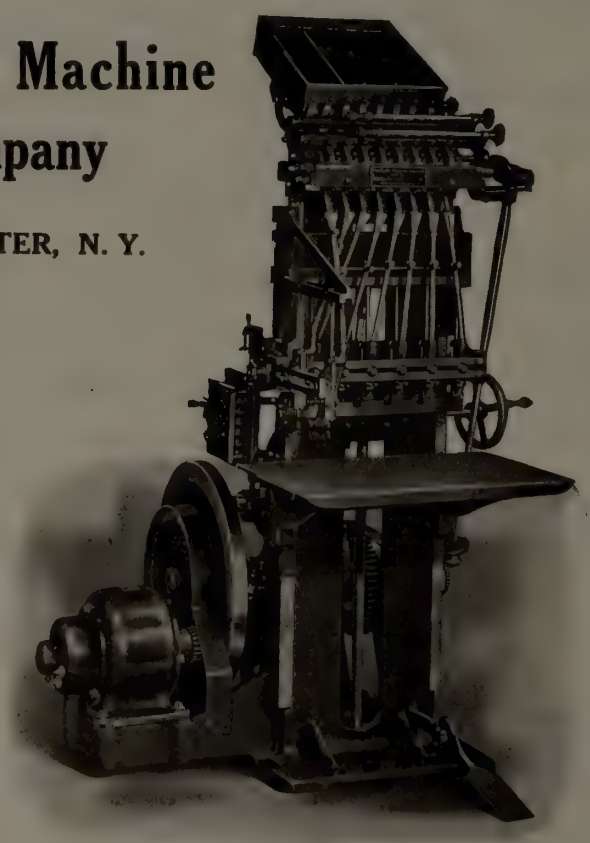
barrels about 700 lbs.
½ " " 350 "
¼ " " 175 "

or smaller packages if you prefer them.

The Canada Starch Co., Limited, Montreal

Morgan Machine Company

ROCHESTER, N. Y.



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Box Board Matchers,

Box Board Printing Machines.

Every manufacturer of boxes; every manufacturer who has nails to drive in any article, or packages of any kind to manufacture, should write the Morgan Machine Company for latest developments in machinery for the Box Industry.

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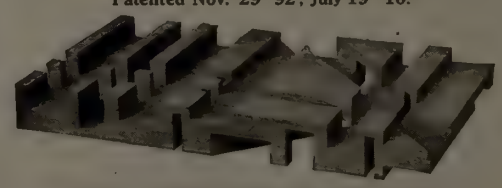
ROCHESTER, N.Y.

Patented Nov. 29 '92; July 19 '10.



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A Huther Bros. Dado Head consists of two outside cutters and enough inside cutters to make the required cut. This Head will cut perfect grooves, with or across grain, any width. It is an easy Head to keep in perfect condition, has a simple quick adjustment, and may be enlarged any time after purchase. Sent on approval and if not satisfactory return at our expense.

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Chisel Tooth Saws

The Choice of Lumbermen in two Hemispheres

More than 80,000 of these saws are now in use in all parts of the world. Hoe Chisel Tooth Saws are backed by 86 years' experience in the manufacture of saws. They are made from the finest steel, evenly tempered throughout. Special Flanged Shanks and Superior Bits are supplied for sawing hardwood.

We are the oldest Saw manufacturers in America

R. HOE & CO. 504-520 Grand Street, NEW YORK CITY

Saved $300.00 Daily In Fuel Bills

Jones Underfeed Stokers in several Pulp and Paper Mills

have made possible fuel savings never before credited any system of firing.

Take as illustration the boiler plants of the Minnesota & Ontario Power Company, Fort Frances, Ontario, and International Falls, Minnesota:

Before the stokers were installed in the latter plant 3,000 tons of coal were required each month, costing them nearly $3.50 per ton. Since installing Jones stokers, under normal conditions, only five tons of coal are burned per week, the balance of heat required being obtained from "hog feed" and paper mill refuse—heretofore a waste product, entailing an enormous and continual expense for its disposal.

The saving is, therefore, 3,000—22=2,978 tons at $3 50=$10,423.00 per month, or more than $300.00 per day.

The equipment is entirely automatic, and should a drop of a few pounds occur in the steam pressure, or should there be a shortage in the supply of refuse, the stokers immediately feed in more coal and the blower equipment supplies more air, so that the normal pressure is promptly restored. If for any reason the "hog feed" is temporarily abandoned, the stokers automatically make the change over, carrying the load with coal alone.

Jones Underfeed Stoker Co., Limited

National Trust Building, TORONTO

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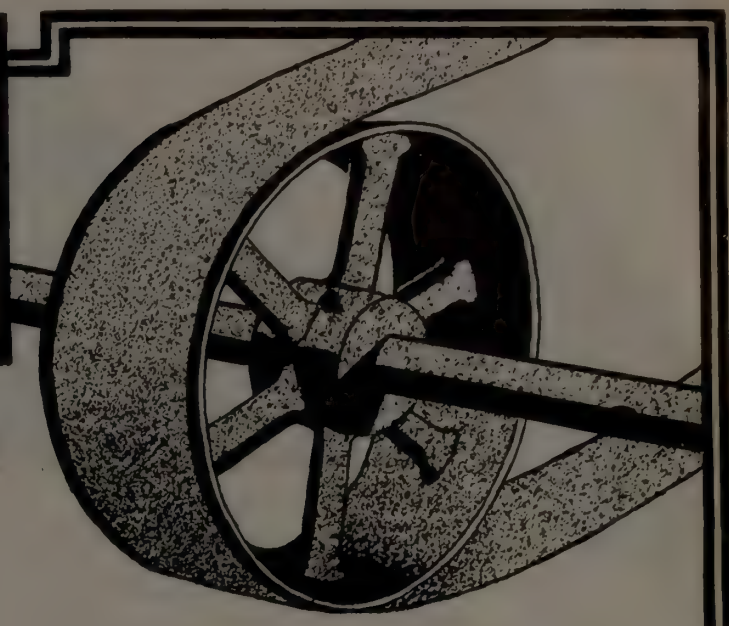
"Wilson Bros." Hardwood Flooring

is the Flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully selected stock, and every precaution is taken throughout our entire system to make it fulfil the requirements in every particular. Write us for prices.

Wilson Bros., Limited - Collingwood, Ont.

When You Overhaul Install

GOODHUE BELTS



"Acme Waterproof" Leather Belting

This brand is especially well suited to the wet places in a saw or pulp mill and will run true as long as it is in service. When you are overhauling your mill equip it with "Goodhue Belts" and you will never regret it. They are honestly made of solid leather —every inch a good belt and they won't stretch.

Get our details and prices.

J. L. Goodhue & Company, Limited

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Lumbermen's Tents and Clothing

Pure wool, Waterproof Mackinaw Coats, Pants and Shirts, the kind you have been looking for.

Repellant Brand Army Duck Tents

The best duck that money can buy. We can equip your van complete.

Pure wool Blankets, Sweaters, Underwear. Hand Knit Mitts and Socks. Palmers Shoe Packs, Buck and horse hide Moccasins, etc.

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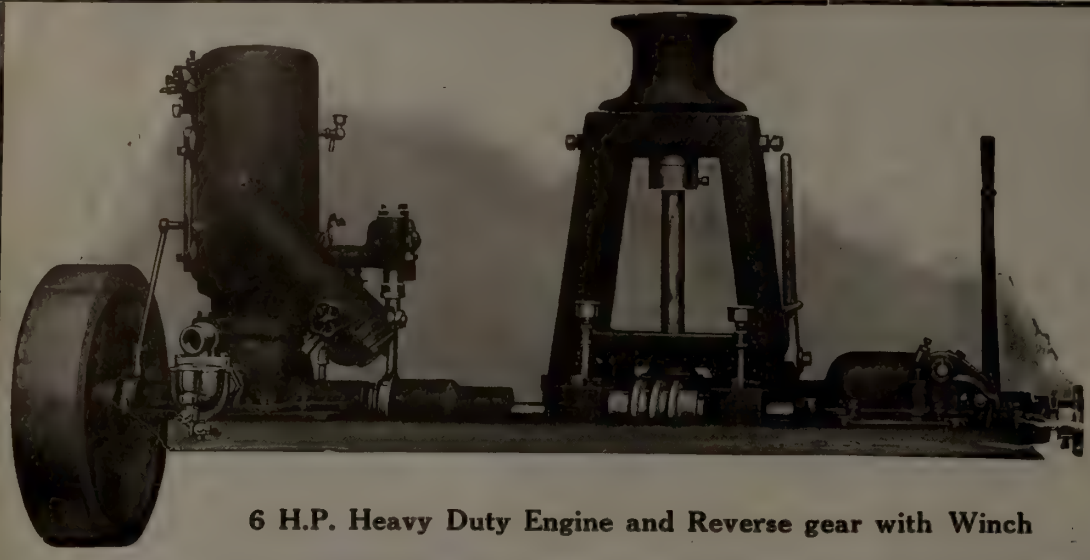
147 to 151 Albert Street, Ottawa, Can.



6 H.P. Heavy Duty Engine and Reverse gear with Winch

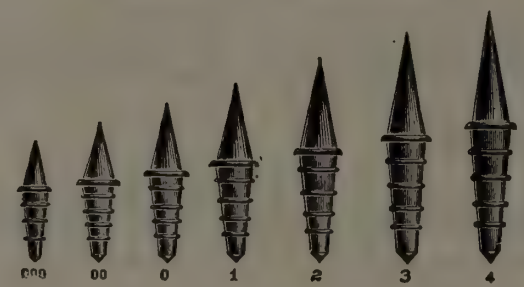
River Driving Costs

will be decidedly lower this year if you use Adams Gasoline Towing Machinery in 25 ft. punts for carrying supplies and handling booms and logs. One man does the work of ten. We have both machinery and complete punts for prompt shipment. It will pay you to write us now. Gasoline engines all sizes, 2 to 25 h.p.

Adams Launch & Engine Co.
Penetang, Ont.

Boot Calks

Made in Canada



Made from Best Refined Tool Steel,
Forged and Oil Tempered.
Quality Absolutely Guaranteed.

Thirty in Ball and Five in Heel are the Numbers usually required.

F. Bacon & Co.

Montreal

Feed the Horses
Caldwell's Molasses Meal
Every Day

CALDWELL'S Molasses Meal should be fed every day. Don't suppose this is extravagance. It isn't. It's a real saving for the nutritive qualities of the meal increase the other food values 25%.

Caldwell's Molasses Meal is not a stimulant. It gives an antiseptic and digestive force that a straight diet of cereals lacks.

Write us for prices. You will be surprised at the small cost and the splendid results obtained.

Caldwell Feed & Cereal Company, Limited
Dundas, Ont.

Pink's Lumbering Tools

The Standard Tools in every province of the Dominion, New Zealand, Australia, etc.
We manufacture all kinds of lumber tools. Light and Durable.

Long Distance Phone, No. 87
Send for Catalogue and Price List.
Sold throughout the Dominion by all Wholesale and Retail Hardware Merchants.

The Thomas Pink Company, Limited
Manufacturers of Lumber Tools

PEMBROKE - - - - - ONTARIO

It's a Pink anyway you take it, and it's the best Peavey made.

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

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A Test In Your Workshop

will convince you of this fact:

That it is cheaper to use two files where you now use only one.

Take a certain piece of work and give one man a new file, and another a half worn file on a similar piece of work.

The man with the new file is doing what you are paying him for. The other man is filing away your time.

The man with the new file takes a pride in his work.

The man with the old file starts with a grouch, and the work suffers.

When the inefficient point in the files is reached it is good policy for you to have your men discard them.

And they should be replaced with the five famous brands:

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE
(Made In Canada)

Made in Canada by a plant controlling 90% of the file business.

Backed by 50 years' experience in the making of efficient files.

Send for your FREE copy of "File Filosophy" NOW.

Nicholson File Co.
Port Hope, Ontario

DEALERS EVERYWHERE.

CURRENT LUMBER PRICES—WHOLESALE

TORONTO, ONT.

Car Lots

White Pine:

1 inch No. 1 cuts and better	$50 00	52 00
1½ inch No. 1 cuts and better	60 00	62 00
2-in. No. 1 cuts and better	62 00	64 00
1½-in. No. 2 C. & B.	45 00	47 00
2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
1-in. mill cull sidings		21 00
5/4 and 6/4 x 4 m.r., m.c. out		27 00
5/4 and 6/4 x 5 m.r., m.c. out		28 00
5/4 and 6/4 x 6 m.r., m.c. out		28 00
5/4 and 6/4 x 8 m.r., m.c. out		29 00
5/4 and 6/4 x 10 m.r., m.c. out		32 00
5/4 and 6/4 x 12 m.r., m.c. out		34 00
2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
Norway, c. and c. 2-in.		32 00
Spruce mill run 1-in. and 2-in.		22 00
Spruce mill culls		18 00

Hemlock No. 1:

1 x 4 and 5-in. x 9 to 16 ft.	17 00
1 x 6-in. x 9 to 16 ft.	20 00
1 x 8-in. x 9 to 16 ft.	21 00
1 x 10 and 12 in. x 9 to 16 ft.	22 00
1 x 7 ,9 and 11 in. x 9 to 16 ft.	19 00
1-in. No. 2, 6-ft. to 16-ft.	16 00
2 x 4 to 12, 10 and 16 ft.	19 00
2 x 4 to 12-in., 12 and 14 ft.	19 00
2 x 4 to 12-in., 18 ft.	22 00
2 x 4 to 12-in., 20 ft.	24 00
2 x 4 to 12-in., 22 ft.	25 00
2 x 4 to 12-in., 24 ft.	26 00
2-in. No. 2, 4-in. and up in width, 6 to 16 ft.	16 00
Clear in B. C. cedar, kiln dried	50 00

Douglas Fir:

Dimension Timber up to 32 feet: 8x8, 10x10, 10x12, 10x14, 12x12, 12x14, 14x14, 14x16 up to 32 ft. ... 31 50

6x10, 6x12, 8x10, 8x12, 10x16, 12x16, 16x16, 16x18, 18x18, 20x20, up to 32 ft. ... 32 00

6x14, 8x14, 12x18, 18x20, up to 32 ft. ... 32 50

6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft. ... 33 00

10x20, up to 32 ft. ... 33 50

6x18, 8x18, up to 32 ft. ... 34 00

6x20, 8x20, up to 32 ft. ... 35 00

Timber in lengths over 32 feet take the following additions: 33 to 35 ft., 50c; 36 to 40 ft., $1; 41 to 45 ft., $3; 46 to 50 ft., $5; 51 to 55 ft., $7; 56 to 60 ft., $9; 61 to 65 ft., $12.50; 66 to 70 ft., $15; 71 to 75 ft., $18; 76 to 80 ft., $22.

Fir flooring, edge grain	35 00
No. 1 and 2 cedar 1-in. Fir rough	38 00
No. 1 and 2 clear 1¼, 1½ and 2-in. Fir rough	40 00
1½-in. No. 1 4-ft. pine lath	5 00
1½-in. No. 2 4-ft. lath	4 75
1½-in. 32-in. pine	2 65
1½-in. No. 1 4-ft. hemlock lath	4 00
1½-in. mill run hemlock lath	3 75
XX B. C. cedar shingles	2 25
XXX 6 butts to 2-in.	2 90
XXXX 6 to 23-16-in.	3 10
XXXXX	3 35

Hardwoods—Per M. Feet, Car Lots

Ash, white, 1sts and 2nds, 1½ and 2-in.	60 00
Ash, white, No. 1 common	45 00
Ash, brown, 1sts and 2nds, 4/4	50 00
Ash, brown, common and better	39 00
Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
Birch, 1sts and 2nds, 4/4	39 00
Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet.	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
White oak, ¼ cut, 5/4 and 6/4, 1sts and 2nds	88 00
White oak, ¼ cut No. 1 common	55 00
Hickory, 1sts and 2nds, 4/4	70 00
Hickory, 6/4 and 8/4, 1sts and 2nds.	75 00

OTTAWA, ONT.

Manufacturers' Prices

Pine good sidings:

1-in. x 7-in. and up	$52 00	54 00
1¼-in. & 1½-in. x 8-in. and up	55 00	58 00
2-in. x 7-in. and up	58 00	62 00
No. 2 cuts 2 x 8-in. and up	40 00	42 00

Pine good strips:

1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00

Pine good shorts:

1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in.	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards: 1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run: mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce: 1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00

Lath per M:

No. 1 white pine 1¼-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles: xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak		
According to average and quality	60	70
Elm		
According to average and quality, 40 to 45 feet	70	75
According to average and quality, 30 to 35 feet	50	60

Ash

13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40

Birch

14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00

Birch Planks

1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00

Cuts and Better

4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00

No. 1 Cuts

1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00

No. 2 Cuts

1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00

No. 3 Cuts

1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00

Common and Dressing Mill Run

1-in. x 4-in.	25 00
1 in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00

No. 1 Barn

1 inch	31 00	45 00
1¼, 1½ and 2-in.	36 00	45 00
2½ and 3-in.		45 00
4 inch		50 00

No. 2 Barn

1 inch	28 00	36 00
1¼, 1½ and 2-in.	30 00	36 00
2½ and 3-in.		38 00

No. 3 Barn

1 inch	21 00	28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00	25 00

Box

No. 1, 1, 1¼, 1½, 2-in.	22 00	25 00
No. 2, 1¼, 1½, 2-in.	19 00	23 00

Mill Culls

Mill run culls, 1-in.		19 00
1, 1¼, 1½ and 2-in.		20 00
No. 2	17 00	18 00

Lath

No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50

No. 1 Common Boards

4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50

Flooring

4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00

Shiplap—Finished

6 inch	20 00
8, 10 and 12 inch	21 00

Siding

6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50

Lath

No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed)	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00
No. 3 Edge grain $3.00 per M. extra.	

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 58)

National Motor Truck

Specifications

TRANSMISSION

Our own design, at present made for us by the Covert Manufacturing Company.

2 and 3½ ton Models, 4 speeds forward and a reverse. Transmission is placed midway between rear axle and motor.

CLUTCH

Enclosed dry-plate variety.

IGNITION

Dixie Bosch or Eiseman, high tension. Independent.

CARBURETOR

Zenith. Control by hand throttle at top of steering post and by accelerator on toe board.

Transmission control and emergency brake levers are in centre and steering wheel is placed to the right or left at the option of the purchaser.

RADIATOR

On both 2 and 3½ ton models, is of built-up type, having cast top, bottom and sides, enclosing fin and tube centre core.

Directly behind the radiator is mounted an 18-inch, high efficiency fan. Water is forced by a centrifugal pump. The radiator core is approximately 575 square inches, cross sectional area.

STEERING GEAR

is of the Worm and Nut, fore and aft type, at present made for us by the Ross Gear & Tool Company. The trunion shaft carrying the Pitman arm is of heat-treated, nickel steel, 1½ inches in diameter. The Pitman arm is a special, drop forging. Hand wheel nas aluminum spider 20 inches in diameter.

FRONT AXLE

Timken 2 x 3 in. I-beam section.

REAR AXLE

is the well-known Timken, David Brown worm drive. The driving strain is taken through radius rods attached to rear axle and frame.

SPRINGS

are semi-elliptic front and rear, and are of silico-manganese steel, self lubricated. Front springs are 48 x 3 and rear springs are 52 x 3. All spring-eyes punched.

WHEELS

Best oak of artillery design with squared spokes, 14 to the wheel. Front wheels 36 x 5, Rear, 40 x 5, dual.

TYRES

36 x 5 in. front. 40 x 5 in. dual, rear. Solid rubber and demountable rims.

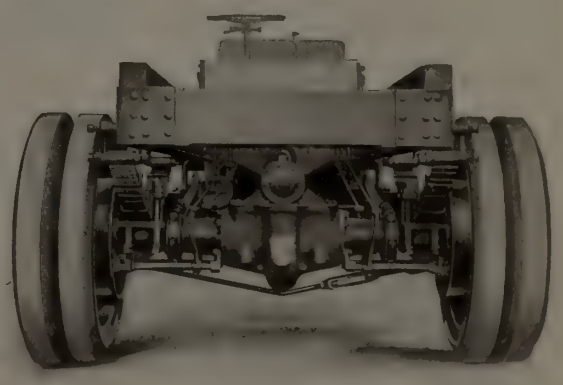
FRAMES

High carbon, open hearth ship channel.

Cardan shaft is tubular, made from seamless, drawn steel tubing of .35 carbon steel, heat-treated.

EQUIPMENT

Three Adlake pressed steel truck lamps, jack and a full set of tools.



For Lumber Delivery

The "National" gasoline motor truck promises to revolutionize the delivery branch of the lumber industry. One "National" truck can do the work of many teams and do it more economically.

A glance at the specifications will show the thoroughness and strength of the "National" truck. It has made good on many severe service tests. Let us tell you what big savings can be effected when you deliver your lumber by "National" motor trucks instead of horses.

National Steel Car Co., Limited

Hamilton, Canada

CURRENT LUMBER PRICES—Continued

No. 1 Moulding 8/4	58 00
No. 2 Moulding 5/4	47 00
No. 2 Moulding 6/4	47 00
No. 2 Moulding 8/4	47 00
No. 1 Barn 1 x 12	48 00
No. 1 Barn 1 x 6 and 8	34 00
No. 1 Barn 1 x 10	36 00
No. 2 Barn 1 x 6 and 8	32 00
No. 2 Barn 1 x 10	34 00
No. 3 Barn 1 x 6 and 8	26 00
No. 3 Barn 1 x 10	27 00
Box 1 x 6 and up	23 00
Box 1 x 10	25 00
Box 1 x 12	26 00
Box 1 x 13 and up	30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00
All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1¾-in. spruce laths	4 10	4 20
1½-in. spruce laths	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 45	3 50
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear	3 25	3 30

The Big Four

Fleming Remedies

We are makers of many effective remedies for the various ailments of live stock but the "Big Four" described below should be in every lumber camp in the land.

General Liniment

Fleming's general liniment is a sure cure for bruises, sprains, swellings, sore tendons and general minor ailments.

Price $1.00

Healing Oil

Our healing oil is an indispensible article because of its great healing and antiseptic power.

Price 50c. and $1.00

Colic Cure

Fleming's Colic Cure is a prompt remedy for spasmodic or flatulent colic. One dose usually relieves the attack. Bottle contains eight doses.

Price $1.00

Tonic Heave Remedy

Not a heave remedy only, but a general tonic and cough remedy, blood purifier and general conditioner. It prevents as well as cures many ailments.

Price $1.00

Write for the FREE "Fleming's Vest-Pocket Veterinary Adviser"

FLEMING BROS.

79 E. Adelaide St. *Chemists* TORONTO

We Manufacture

BABBITT METALS

That Give Excellent Service

Harris Heavy Pressure

"The Babbitt Metal Without a Fault"

is best for all General Machinery Bearings in all

Lumber Mills and Woodworking Plants

It Has Stood the Test of Time.
It Will Not Crack or Squeeze Out.
It is Copper Coated and Copper Hardened.

Order a box from our nearest factory.

The Canada Metal Co., Limited

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Meet Me at the TULLER—for Value, Service, Home Comforts.

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Hotel Tuller

DETROIT, MICH.

Center of business on Grand Circus Park. Take Woodward car, get off at Adams Avenue

ABSOLUTELY FIREPROOF

200 Rooms, Private Bath, $1.50 Single, $2.50 Up Double.
200 Rooms, Private Bath, $2.00 Single, $3.00 Up Double.
100 Rooms, Private Bath, $2.50 Single, $4.00 Up Double.
100 Rooms, Private Bath, $3.00 to $5.00 Single, $4.50 Up Double.

TOTAL, 600 OUTSIDE ROOMS
All Absolutely Quiet

Two Floors—Agents' Sample Rooms. New Unique Cafes and Cabaret Excellente.

PRATT & WHITNEY CO.

OF CANADA, LIMITED

SMALL TOOLS

Taps — Dies — Reamers — Cutters — Drills

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As good as money can buy—Guaranteed absolutely!

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SAW MILL CHAINS

Superior in Design, Workmanship, Quality
High Carbon Steel Pins.
Patterns Full Weight—Full Strength

We are prepared to make prompt shipments of standard sizes from our own factory and warehouse in Toronto. Let us figure on your requirements.

This Trademark >——————< *on every link.*

Write for Catalog No. 110D.

Canadian Link-Belt Company, Ltd.
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Always in Your Stable
Stops Bleeding

The wise horse owner will always have in his stable a supply of Douglas Egyptian Liniment. It is so easily and quickly applied and always proves a rapid cure for the many ailments of horses.

It is the only liniment on the market that **will stop bleeding at once.**

Free samples and literature mailed on request.

Douglas & Company
Napanee, Ont.

Garlock Packings

Are made in over two hundred styles and combinations to meet every known requirement. We will assume entire responsibility in selecting the proper styles and combinations of our packings to work successfully and economically under any stated condition; and it goods are not wholly satisfactory to purchaser we will refund promptly the cost of same. A card will bring our new catalog which fully describes our various styles of packings.

Style No. 777

Style No. 150

The Garlock Packing Co.
Hamilton, Ontario

Branches:
Calgary
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Are your horses of use to you?

This seems an absurd question—and the answer is always **"Of course they are"**—In which case provide your stables with:

Johnson's Reliable Veterinary Remedies

Johnson's Horse Liniment, No. 1 (Alcoholic)

1 gal. jugs (Imperial)	$4.50 gal.
1 lb. bottles	8.00 doz.
2 lb. bottles	15.00 doz.

Johnson's Horse Liniment, No. 2 (an oil liniment)

1 gal. jugs (Imperial)	3.00 gal.
1 lb. bottles	6.00 doz.
2 lb. bottles	11.00 doz.

Johnson's Horse Colic Remedy
A sure and speedy cure for all kinds of Colic

1 gal. jugs (Imperial) 40 doses	5.00 gal.
1 lb. bottles 4 doses	8.00 doz.
2 lb. bottles 8 doses	15.00 doz,

Johnson's Veterinary Healing Ointment (Gall Cure)

2 lb. tins	2.00 per tin
4 oz. tins	3.50 doz.

Johnson's Condition Powders (Concentrated)

1 lb. Packages	3.60 per doz.

Johnson's Camp and Household Remedies, such as Cough Syrup, Healing Ointment, Headache Powders, Big 4 Liniment, Stomach Bitters, Cathartic Pills, etc., etc., have stood the test of twenty-five years and are in use all over Canada, from the Atlantic to the Pacific. Prices are lower than those of all other manufacturers. Letter orders receive prompt attention.

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(Continued on page 64)

Exposed to Acid Fumes

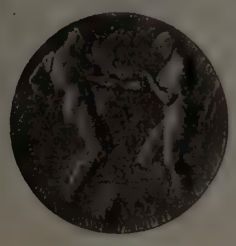
SINCE July, Nineteen Fourteen, this Spartan Belt has been pumping sulphuric acid fumes from the pickling room at the plant of the Halcomb Steel Company, Syracuse, N.Y.

The corrosion, as seen in the photograph, around the blower, indicates the action of the acid fumes and gives some idea of the unusual service conditions under which the Spartan Belt has operated.

This belt has not only withstood exposure to acid fumes for more than a year, but during that time has operated with absolutely no protection from weather extremes.

Notwithstanding the abnormal service conditions existing, Spartan has given perfect satisfaction, which is pretty convincing evidence that this Belting is impervious to conditions which quickly ruin ordinary belting. Why not Spartan Belting as a solution of your transmission problems?

At the Panama-Pacific Exposition we received Gold Medal of Honor, the highest award granted leather belting manufacturers for the excellence of their products.



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For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

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We make just the kind of gloves you need in your work.

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EISENDRATH'S CELEBRATED HORSE HIDE

Gloves and Mittens

are making good in every lumber camp in Canada and the States. They are strongly constructed, and will wash out soft and pliable after being subjected to the tests of heat, steam and water. Be sure the diamond-shaped "Asbestol" trademark is on every pair you buy.

Dealers and Commissaries: Keep your "Asbestol" stock in good trim. Order from your wholesaler now and then, and ask for glove rack which we will furnish you free for purposes of display.

Eisendrath Glove Company

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Made in Canada

Our fifty years' experience in the design and manufacture of of logging locomotives is at your disposal. Many of the largest logging operators in Canada are using our "Canadian Made" locomotives.

Our logging models are as carefully designed and built as our 200 ton sizes—oil or coal burning.

MAY WE SEND YOU SPECIFICATIONS?

This engine is 13½ ins. x 18 ins. and weighs 35 tons.

Canadian Locomotive Company, Limited, Kingston, Ont.

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PETERBOROUGH, ONT.

Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

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Lumber Trucks

For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East TORONTO

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The designs of our Logging locomotives are the result of wide experience, extending over a period of 80 years.

The material used in their construction is thoroughly tested and is the best of its kind.

All details are accurately finished to standard gauges and are absolutely interchangeable on all locomotives of the same class and size.

This cuts out long delays at critical times of the work, as parts liable to wear can be kept on hand or shipped promptly from our works.

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DOMINION EXPRESS BUILDING, MONTREAL, CANADA.

CLIMAX Improved Geared LOCOMOTIVES FOR WOOD AND IRON RAILS

A 62-ton Climax Locomotive Designed Especially for Heavy Logging Work.

Climax Locomotives are successfully operated on steep grades and sharp curves. Any weight or gauge. Locomotives in stock for immediate shipment. Get Catalog "H."

CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.
VANCOUVER MACHINERY DEPOT, LTD., VANCOUVER, B.C.

The Peter Hay Knife Co., Limited

GALT, ONTARIO

MANUFACTURING WOODWORKING

Machine Knives, Circular Cutters and Mortise Chisel

PRESSES
Boving Hydraulic & Engineering Co.
Perrin & Company, W. R.

PULLEYS & SHAFTING
Boving Hydraulic & Engineering Co.
Dodge Mfg. Company, Limited
Waterous Engine Works Company

PULP MILL MACHINERY
Boving Hydraulic & Engineering Co.

PUMPS
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

ROOFING
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company

SAWS
Atkins & Company, E. C.
Disston & Sons, Henry
Hoe & Company, R.
Shurly-Dietrich Company
Simonds Canada Saw Company

SAW SHARPENERS
Rogers & Company, Samuel C.

SAW MILL MACHINERY
Berlin Machine Works
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company

SHINGLES
Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SNOW PLOWS
Bateman-Wilkinson Company
Pink Company, Thos.

SOUTHERN PINE
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Cameron & Company
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Garrett Lumber Company, T. H.
Gates Lumber Company
Hobart & Company
Mason, Gordon & Company
Southern Lumber Company
Stout Lumber Company
Valley Lumber Company
Wilson Lumber Company
Wisconsin & Arkansas Lumber Co.
Wuichet, Louis

SPRUCE
Auger & Son
Bartram Bros.
Blair & Rolland
Bourgouin, H.
Brown Corporation
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL BARRELS
Smart-Turner Machine Co.

STEEL CHAIN
Canadian Link-Belt Company
Columbus Chain Company
McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

STEEL DRUMS
Smart-Turner Machine Co.

STOVES
Canada Stove & Furniture Company

STOKERS
Jones Underfeed Stoker Company

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

TIMBER BROKERS
Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TRANSMISSION MACHINERY
Canadian Link-Belt Company

TUGS
West & Peachey

VENEERS
Hoffman Brothers Company
Webster & Bro., James

VENEER MACHINERY
Perrin, William R.
Philadelphia Textile Machinery Co.

VETERINARY REMEDIES
Douglas & Company
Fleming Bros.

WATER WHEELS
Boving Hydraulic & Engineering Co.

WOODWORKING MACHINERY
American Woodworking Mach. Co.
Berlin Machine Works
Canadian Blower & Forge Company
Long Manufacturing Company, E.
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
St. Gabriel Lumber Company

A Sure Way To Increase Your Profits

Use the best Saws. We guarantee that ATKINS STERLING CROSS CUT SAWS will cut twenty-five per cent more timber than any other Saw with less cost for re-fitting. We not only claim this—WE GUARANTEE IT—and we'll make our Guarantee good.

Write to the nearest address below—say *"I want to know about your proposition in the Canada Lumberman."*
No obligation. Just write us if you want to increase your profits.

ATKINS NO. 5 PERFECTION

ATKINS NO. 69 EUREKA

Two of our most popular patterns. We make others. Let us show them to you.

Write to-day to

E. C. ATKINS & CO.

Makers of Sterling Saws

Factory—HAMILTON, Ont. ***VANCOUVER BRANCH—109 Powell St.***

United States Factory—Indianapolis, Ind.

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

Tillson's Rolled Oats

Rainbow Flour—Top Patent Manitoba.

Goldie's Star—Famous Blended Flour.

Lily Flour—For Pies and Pastry.

Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

GUARANTEED ABSOLUTELY PURE

Canadian Cereal and Flour Mills Co., Ltd.

TORONTO - - - - - CANADA

RUBBER GOODS FOR LUMBERMEN

Belting Our long experience in the making of Rubber Belts enables us to specialize on this line. "P.M.S.," "Special Drive" and "Lion" are our leading brands for power transmission.

Packings "Redstone" High Pressure Sheet Packing has proved by test that it will outlast any other similar packing on the market. We make Spiral and Ring Packings, etc., that are equally reliable.

Hose for Steam, Water, etc., in various grades, made especially to give satisfactory and economical service under different conditions.

Fire Hose One or more of our twenty brands of Fire Hose will be found, not only in the best equipped Factories, Mills, etc., but in almost every Fire Department in the Dominion.

Gutta Percha & Rubber, Limited

TORONTO MONTREAL WINNIPEG REGINA SASKATOON CALGARY EDMONTON VANCOUVER

THE E. LONG MANUFACTURING Co. LTD. SAW MILL MACHINERY ORILLIA, CANADA

Vertical Steam Feed Valve

By reference to the cut, you will note that the valve stems are so connected to the bell cranks that one valve balances the other, therefore they are without friction and work very easily.

Being a vertical valve, the plug is virtually suspended in a film of oil, consequently, will remain steam tight for a long time. It is self draining, and being a vertical valve and connected as shown, when the sawyer's lever is plumb they are both on the centre, and therefore no amount of expansion will effect their proper working.

The exhaust, which is a mixture of steam and water, does not pass through the valve proper, but out underneath the plug, directly into the atmostphere, hence the valves do not stick or kick.

Should the connections break, the plug drops to position, completely closing the ports, thus making a safety valve as well as an operating valve. All valves are thoroughly tested under steam pressure before shipment.

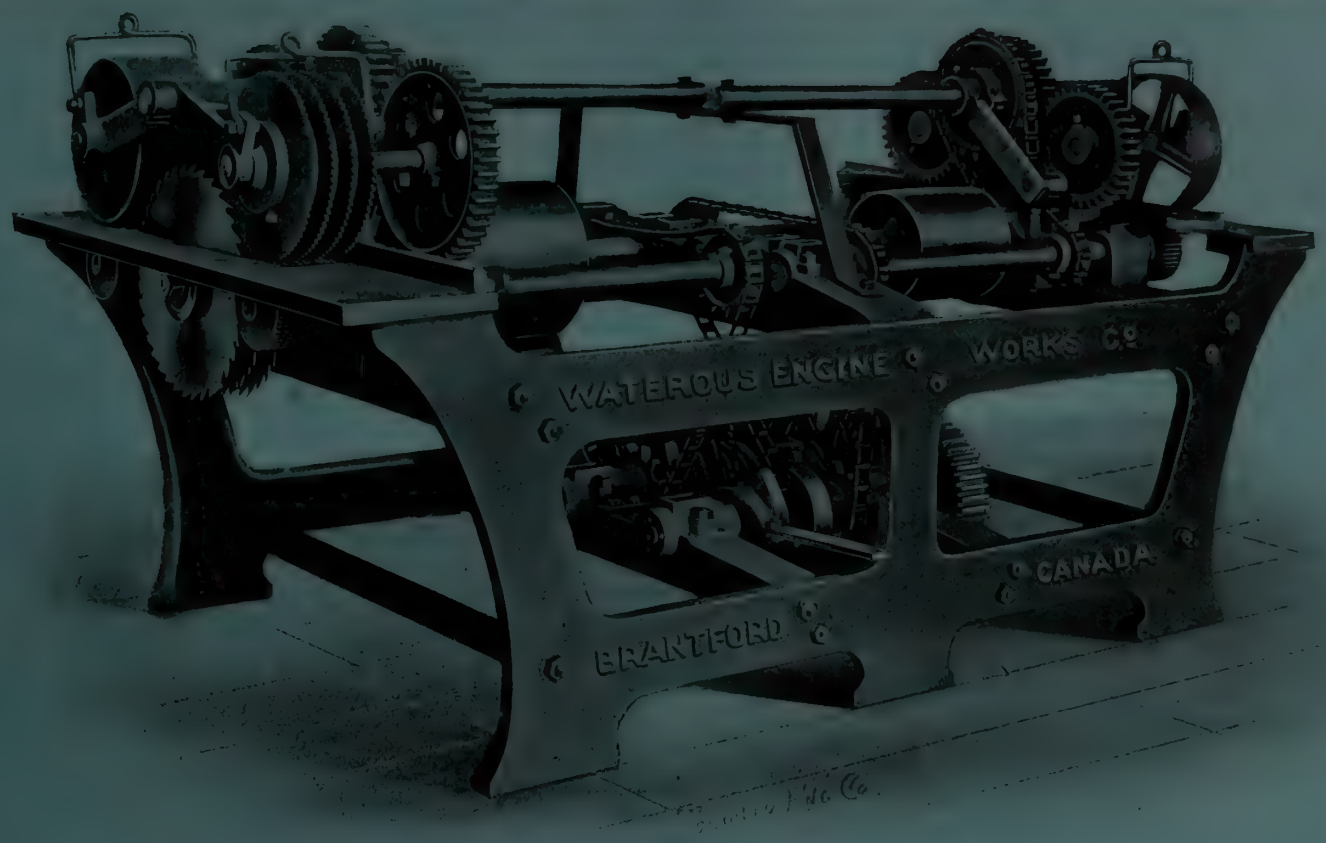
Have you our catalogue?

The E. Long Mfg. Co., Limited, Orillia, Ont.

Agencies:

Montreal - Williams & Wilson, Ltd.
Winnipeg - Stuart Machinery Co., Ltd.
Edmonton & Calgary - Gorman, Clancey & Grindley, Ltd.
Vancouver - Robert Hamilton & Co.

"40,000 Laths a day"



WATEROUS COMBINATION LATHMILL & BOLTER

The fastest, most compact, heaviest combination machine on the market.

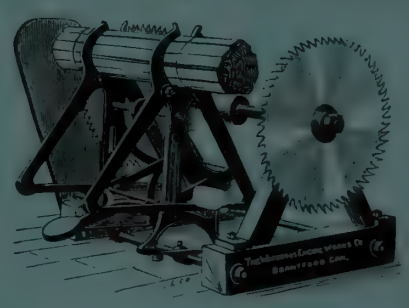
Turned out to stand up under hard and strenuous service, its design is all for economy of time and labor.

The bolter operator handles the slabs with his left hand. They pass through the saws, slide down the incline table to the lathmill operator's right hand. Operation is easy and continuous. That's the secret of the large capacity of these machines.

Notice these features of construction—**all iron frame; power drive for both upper and lower feed rolls; independent drive for feed rolls; spiral cut lower rolls that crowd the stock against the guides.**

The upper rolls are of large diameter, of improved design, to grip the stock firmly, without slip or tendency to mar. They can be raised or lowered or swung up out of the way when changing saws. Arbors are of steel, 2 7/16-in. diameter. Bolter saws, three, are 16-in. diameter, Lathmill saws, four in all, 12-in. diameter.

If you are looking for a profitable way to utilize your waste slabs and edgings, ***make laths.*** More about the machine in the catalogue—No. 1051.



This Little Machine

our Combined Lath Trimmer and Binder is built in two sizes, for 50 and 100 lath respectively. The cut explains itself. The laths are placed in the bunching arms, these are closed by pressing the foot tread; the laths are easily tied and the bundle is tilted between the saws which trim it smooth and even at both ends. We furnish the Binder alone when desired.

30 in. saws are used with the combination machine.

Described in Bulletin No. 1051.

The Waterous Engine Works Co., Limited

H. B. Gilmour, Vancouver, B.C. **Brantford, Canada** Winnipeg, Man.

"FROST KING" METAL

$5,000,000.00
worth of mixed metal sold annually.

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. **Price 30c per lb.**, Fort William and East; West of Fort William **35c per lb.**, delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, **40c per lb.**; West of Fort William, **45c**, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

Montreal Toronto Winnipeg

The J. C. McLaren Belting Co.
Limited

General Mill Supplies MONTREAL

AJAX
Loading Chain

is the loading chain that 90% of all the lumbermen in United States and Canada use and swear by. Do you?

Made by

Standard Chain Company
Pittsburgh, Pa.

Montreal
Alexander Gibb, St. Nicholas Bldg.

Winnipeg
Bissett and Webb

Canada Lumberman & Wood Worker

WATER WHEELS
GOVERNORS, PUMPS

Highest quality

Boving Hydraulic & Engineering Co.
LINDSAY, ONT. Limited

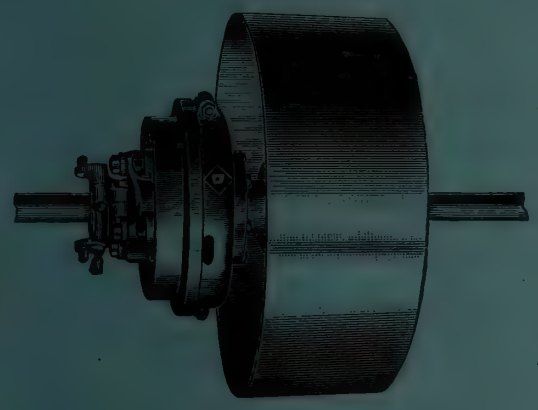
Made in all styles

Electric-Welded Boom Chain

We also specialize
Log Chains and "Dreadnaught" Loading Chain

Made in Canada Write to Fully Guaranteed

McKinnon Chain Co., St. Catharines, Ont.



DODGE FRICTION CLUTCH PULLEYS

For Saw Mills and Planing Mills

A simple, positive, durable clutch! Every Friction Clutch Pulley we sell is guaranteed suitable and satisfactory for the work or money refunded. All sizes split or solid for quick shipment.

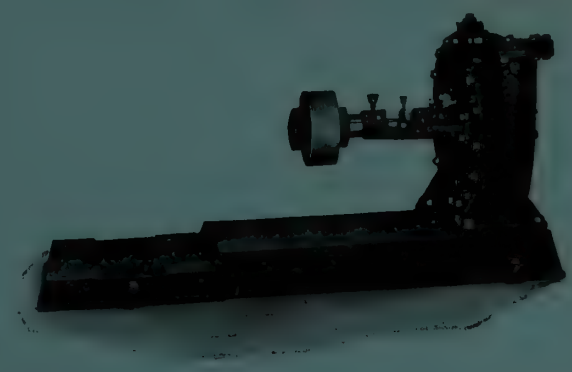
Dodge Manufacturing Company, Limited
TORONTO -:- MONTREAL

ASBESTOS

We manufacture practically every article that can be made of Asbestos—including

Asbestos { Packings, Boiler Gaskets, Pipe and Boiler Coverings

Turner Brothers Canada, Limited
MONTREAL



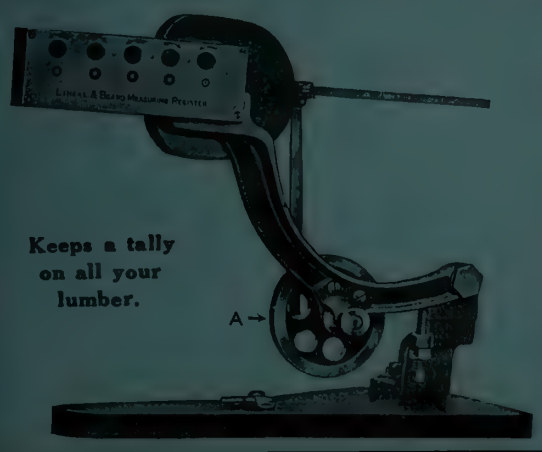
The Best Insurance

against expensive delays caused by breakdowns.

A Reliable Pump

as built by

The Smart-Turner Machine Co., Ltd., Hamilton Canada



Keeps a tally on all your lumber.

Accurate Lumber Measuring

Depending upon humanity to measure up thousands of feet of lumber is a most uncertain practice. Put a Morrison Lumber Measuring Register on every machine in your mill and you will always have an accurate count of the lineal or board feet of lumber passing through each machine. *Write us for particulars.*

The James Morrison Brass Mfg. Co., Limited
93-97 Adelaide St., West, TORONTO

Alphabetical Index of Advertisers, Page 50 Classified Directory to Advertisements, Page 56

A waterproofed leather belting made from the very best materials in the very best way—with a surface that "grips" the pulley.

Ensure Efficiency

by using

A Good Belt on a Good Machine

If you are proud of the good machinery you possess, it is surely a pity—to say nothing of poor business—not to get the most out of it.

And you are not getting the most out of it unless you use "Amphibia" belting to drive it.

"Amphibia" has a surface and flexibility which make it the most efficient and "gripping" belt on the market.

By adopting "Amphibia" belting you ensure your machinery working at its maximum efficiency; you prevent the loss in transmission of valuable—and costly—power because you are using a medium of transmission which is perfectly designed for its task; you do away with the expense involved in the readjustment necessitated by the "stretching" of belts; you obviate the cost of renewals, because "Amphibia" is made from the best of butts procurable and is tanned in our own tanneries by a secret waterproof process which renders the leather impervious to oil, steam, water and fumes.

Your "economy" in buying a cheap and common belt to drive a costly and high-class machine is a false economy—and bad business. Try a sample run of "Amphibia" and prove it.

"Leather like gold has no substitute."

TORONTO
38 Wellington St. E.

ST. JOHN
149 Prince William St.

Sadler & Haworth
Tanners and Manufacturers

For 39 Years Tanners and Manufacturers of the Best Leather Belts

MONTREAL, 511 William Street

VANCOUVER
107-111 Water St.

WINNIPEG
Galt Building

Geo. Gordon & Co., Limited

Cache Bay, Ontario

Red and White PINE

Dressing done on short notice. ***Send us your inquiries.***

FOR SALE: Machinery and Timber

The undersigned offer for sale, in large or small blocks all their remaining timber lands, mills and town property situated in the town of Parry Sound, Ont.

We have sold quite a number of timber parcels but still have some good bargains left in Townships of McDougall, Foley, McKellar, Monteith, Carling, Christie, Shawanaga, Burpee, McConkey, Mills, Allen, Secord, Falconbridge and Street.

Special bargains in the townships of Burpee, Falconbridge and Street for small mills.

We have the following Sawmill Machinery for sale:

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 3-block right hand steam feed carriage fitted with steam set works, made by Wm. Hamilton, Peterboro, with 10-in. steam feed cylinder.

1 Double cylinder steam nigger, right hand.

1 Log Loader for right hand mill.

1 8 ft. Double-cutting Telescope Band Mill, made by Waterous Engine Works.

1 10 in. Double-cylinder steam feed carriage, left hand, for cutting 24-ft. logs.

1 left-hand steam nigger.

1 Log-loader.

1 Endless chain jack ladder with two kickers complete for right and left hand mills.

2 Roger Gang Edgers for 8-in. cants and lumber.

1 Waterous double edger, 6 saws.

2 2-saw trimmers.

1 20-ft. Slash table.

1 16-ft. Revolving Slash Table.

1 Horizontal Slab Resaw with 5-ft. wheels, made by Diamond Iron Works.

1 70-ft. Transfer Chain for sorting lumber, with necessary levers, rolls and transfer chains to complete outfit.

1 Lath Mill with bolter.

2 Lath Trimming Saws.

FILING ROOM

1 Automatic Filing Machine for 12-in. D.C. band saws.

1 Automatic Grinding Machine for 8-in. S.C. band saws.

1 Hand Machine for cut-off saws.

1 Lap Grinder.

1 Set Band Saw Rollers and levelling blocks, with necessary swedges, a number of second-hand band, gang, edger and slash table saws.

POWER PLANT

2 Double Duplex, high pressure Water Pumps.

5 60-in. x 16-ft. Return Tubular Boilers, allowed 125 lbs. steam.

2 125 h.p. Water Wheels.

1 Upright Engine for sawdust conveyor.

1 10 h.p. Engine.

1 Mitts & Merrell Hog.

1 Wood Machine for 22-in. wood.

1 Edger for ripping dry lumber, installed.

1 Edger for ripping dry lumber, not installed.

1 30 h.p. Generator, 250 volt.

1 30 light arc generator.

There is also a large quantity of shafting, pulleys, hangers, belting, tram cars and turn-tables, particulars of which may be had on application.

All of the above open for inspection at Parry Sound.

The Parry Sound Lumber Co., Limited,

26 Ernest Ave. Toronto, Can.

Mason, Gordon & Co. 80 St. Francois Xavier Street, Montreal, Que.

Everything in Timber

Car and Cargo lots only

Douglas Fir, Pine, Hemlock, Spruce, Yellow Pine and Oak

Write, Wire or 'Phone for Prices - **Western Office:—Pacific Building, VANCOUVER, B. C.**

Let us quote you on your requirements of the following stock.

100,000′ 10 x 10 Hemlock—
heavy to 12′ & 16′ lengths
45,000′ 2″ No. 1 C. & B. Maple
100,000′ 1″ No. 1 C. & B. Birch
30,000′ 1″ & 1½″ Log Run Beech

Above is all dry well manufactured stock.

Spears & Lauder 501 Kent Bldg. Toronto, Ont

JOHN DONOGH & CO.

Wholesale Dealers
Are looking for buyers

—Special—

1 x 4 & 5 White Pine common and dressing 1913 cut

Dry Hemlock and Spruce all sizes

1205 TRADERS BANK BUILDING, TORONTO

P. & J. SHANNON

Lumber Manufacturers

BISCOTASING, ONT.

Dry Cull Lumber

at very attractive prices

SHELL BOX STOCK

3 cars 3 in. No. 1 Com. & B. Maple.
1 car 1 x 9 and wider No. 2 C. & B. Birch.
2 cars 1 x 9 and wider No. 1 Com. & B. Maple.
1 car 6/4 x 9 and wider No. 1 Com. & B. Maple.
2 cars 4 x 5 Merchantable Spruce.
2 cars 1 x 10 Merchantable Spruce.

ARTHUR N. DUDLEY

Lumber, Lath and Shingles

109 Stair Building, Toronto **Phone M. 6368**

JOHN GILLIES, President — DAVID GILLIES, Vice-President — J. S. GILLIES, Sec-Treas.

Established 1873

GILLIES BROS.

Limited

Mills and Head Office
BRAESIDE, ONT.

Manufacturers of

WHITE PINE

RED PINE **SPRUCE**

New York City: Guy E. Robinson, 1123 Broadway

We Must Clean Up

Bone Dry 1913 Cut

23,000	1 x 4 and up — 6/16 ft.	No. 1 Hemlock Sidings.
20,000	1 x 4 and up — 6/16 ft.	No. 2 Hemlock Sidings.
30,000	2 x 6 — 8/16 ft.	No. 1 and 2 Hemlock.
18,000	2 x 8 — 8/16 ft.	No. 1 and 2 Hemlock.
12,000	2 x 10 — 8/16 ft.	No. 1 and 2 Hemlock.
30,000	1 x 13 and up	Box and Better Pine.
30,000	1 x 4 and up	No. 3 Common Birch.
18,000	1 x 6 and up	1st and 2nds.
9,000	5/4	Good Birch Shorts.
30,000	1 x 4 and up	No. 2 and 3 Common Maple.

The above lumber is a snap for you.

Write us for prices.

The Long Lumber Company

HAMILTON, ONT.

You Won't Be Scared At Our Prices

Hocken's Hemlock

Same Good Quality, Prompt Shipment and Normal Price.

Hocken Lumber Company, Limited

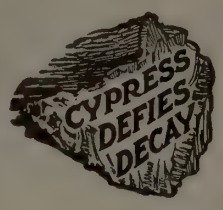
Otter Lake Station, Ont.

Toronto Representative :—L. M. Dougherty, 77 Lindsay Ave., Phone Park. 2170

Our Mills Produce and We Market as Much

GENUINE LOUISIANA RED CYPRESS

As All Other Concerns Combined



250,000,000 feet constantly in stock insures filling any reasonable order promptly.

Our Canadian trade is constantly increasing and we are always striving to merit a still larger increase.

Our salaried salesmen receive credit for mail orders. Try us.

LOUISIANA RED CYPRESS COMPANY

Hibernia Building **New Orleans, La.**

Logging By Rail Enables Us To Run Our Plant the Year Round

This Means Better Service to the Trade

Hemlock, Pine and Hardwoods

ALWAYS IN STOCK READY FOR SHIPMENT

Hemlock, Hardwood and **Spruce Timbers** a specialty—lengths 10/26' long.

We can dress and rip to your orders.

A postal will bring you our monthly stock list with our best prices

Fassett Lumber Company, Limited

Fassett, Que.

KLIM

SPELL IT BACKWARDS

The Lumberman's Milk

In Powder Form

Klim is pure—cheaper than fresh liquid milk. One-third the cost of condensed milk. No freights on useless water—keeps in any temperature—no waste.

Packed for camp use especially in 10 pound tins $2.00 each, the pound makes one gallon. Case lots, special price.

Write for samples, etc.

Canadian Milk Products Ltd., Toronto

Plants:—Belmont, Ont., Brownsville, Ont. **Head Office:—Mail Building**

Wanted - White Pine

We are at all times in the market for dry White Pine all grades and sizes, also will Contract for your this Season's Cut.

Write us and we will call on you.

South Coast and Northern Lumber Co., Inc.

Saranac Lake, New York

Bartram Brothers

Cable Address, "Bartram"
Code, ABC 5th edition.

Ottawa, Canada **Limited**

Some of our stock on hand unsold. December 15, 1915

NORWAY C. & C. F.

	Feet
1 x 4 and up x 10-16	7,224

NORWAY MILL RUN

1 x 4/5 x 10-16	1,503,152
1 x 6 x 10-16	441,853
1 x 7 x 10-16	102,192
1 x 8 x 10-16	43,038
1 x 10 x 10-16	30,000
1¼ x 4 x 10-16	30,292
1¼ x 5 x 10-16	11,798
1¼ x 6 x 10-16	21,375
1¼ x 7 x 10-16	30,521
3 x 4 and up x 10-16	192,049
4 x 5 x 10-16	6,179

NORWAY CULLS

1¼ x 4 and up x 6-16 No. 1	40,392

BIRCH FLOORING

	2-in.	2¼-in.	2½-in. Face
Clear	1 car	¾ car	¾ car
No. 1	1 car	1 car	¾ car
No. 2	5 cars mixed withs.		

WHITE PINE GOOD

1 x 4 and up x 6-16	11,948

WHITE PINE MILL RUN

1 x 5 x 10-16	64,000
1 x 6 x 10-16	118,190
1 x 7 x 10-16	173,085
1 x 8 x 10-16	29,069
1 x 10 x 10-16	2,607
1 x 12 x 10-16	180,192
1 x 13 and up x 10-16	33,176
1¼ x 4 and up x 10-16	117,182
1½ x 4 and up x 10-16	200,000
2 x 4 and up x 10-16	90,211
2 x 6 and up x 10-16	14,290
2 x 8 and up x 10-16	76,913
2 x 12 and up x 10-16	94,831
3 x 4 and up x 10-16	124,340

WHITE PINE COM. & DRESSING

1½ x 6 x 10-16	101,200
1½ x 7 and up x 10-16	89,312
1½ x 12 x 10-16	63,219
2 x 6 x 10-16	87,988
2 x 8 x 10-16	133,918
2 x 10 x 10-16	150,190
2 x 12 x 10-16	183,290

WHITE PINE CULLS

1 x 4 and up x 6-16 No. 2	124,826
3 x 4 and up x 6-16 No. 1	69,397

SPRUCE MILL RUN

5/8 x 4 and up x 8/16	98,000
1 x 4 x 10-16	199,197
1 x 5 x 10-16	354,226
1 x 6 x 10-16	387,930
1 x 7 x 8/16	12,900
2 x 4 x 8/16 Full Thickness	800,000
2 x 5 x 8/16 "	908,900
2 x 6 x 8/16	100,000
2 x 7 x 8/16 "	24,000
2 x 8 x 8/16 "	89,000
2 x 9 x 8/16 "	26,000
2 x 5/10 x 8/16 D1S	81,000
2½ x 9 x 8/16	55,200

SPRUCE CULLS

3 x 4 and up x 6-16	260,000
1 x 4 and up x 6-16	122,000

MILL RUN LATH

1½—32-in. White Pine	187,350
1½—32-in. Norway	645,800
1½— 4 ft. Spruce	1,500,000

CULL LATH

1½ — 4 ft. Spruce	400,000

N.B. CEDAR SHINGLES

Extras	4264M
Clears	3144M
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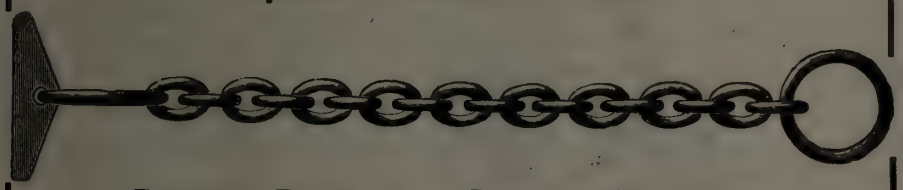

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Dominion Timber Regulations

Licenses to cut timber on Dominion Lands in the Provinces of Manitoba, Saskatchewan, and Alberta, the Northwest Territories, within twenty miles on either side of the main line of the Canadian Pacific Railway in the Province of British Columbia, and in the tract of three and one-half million acres to be located by the Government in the Dominion in the Peace River district in the Province of British Columbia, lying east of the Rocky Mountains and adjoining the Province of Alberta, shall be disposed of by public auction at the office of the Dominion Timber Agent for the districts in which the berths are situated.

Before any parcel of timber is offered for sale it shall be surveyed by a duly qualified Dominion Land Surveyor into berths of an area not exceeding twenty-five square miles, and each of such berths shall then be thoroughly cruised by a duly qualified timber cruiser in the employ of the Dominion Government. The Minister shall then fix an upset price at which the berth shall be disposed of, and no berth shall be sold at less than the price so fixed.

Purchases to the amount of one thousand dollars or under shall be paid in cash at the time of sale. Purchases over one thousand dollars and not exceeding five thousand dollars shall be paid, one-half in cash at the time of sale, and a note or notes shall be given for the remaining half of the purchase price, payable in three months, with interest at the rate of five per cent. per annum. Purchases over five thousand dollars and not exceeding ten thousand dollars shall be paid one-third in cash at the time of sale, and notes shall be given for the remaining two-thirds of the purchase price, payable in three and six months, with interest at the rate of five per cent. per annum. Purchases exceeding ten thousand dollars shall be paid one-fourth in cash at time of sale, and notes shall be given for the remaining three-fourths of the purchase price, payable within three, six and nine months, with interest at the rate of five per cent. per annum. Notes shall be made payable at a bank in the city or town in which the sale is held or at a bank in the city of Ottawa. Cash payments must be made at the time of sale in legal tender or by an accepted cheque on a chartered bank, or by a draft issued by a chartered bank, payable to the order of the Deputy Minister of the Interior. If default is made in any payment required by this section the sale shall be forfeited and void.

The purchaser must also pay the cost or the estimated cost of the survey of the berth before a license is issued.

The licensee shall pay an annual ground rent of five dollars per square mile except for lands situated to the west of Yale, in the Province of British Columbia, in which case the yearly ground rent shall be five cents per acre.

The licensee shall pay the following dues on timber cut on his berth :—

Sawn lumber, 50 cents per thousand feet, board measure.

Railway ties, eight feet long, 1½ cents each.

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Shingle bolts, 25 cents per cord.

And 5 per cent. on the sale of all other products of the berth.

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W. W. Cory,

Department of the Interior, Ottawa, Deputy Minister.
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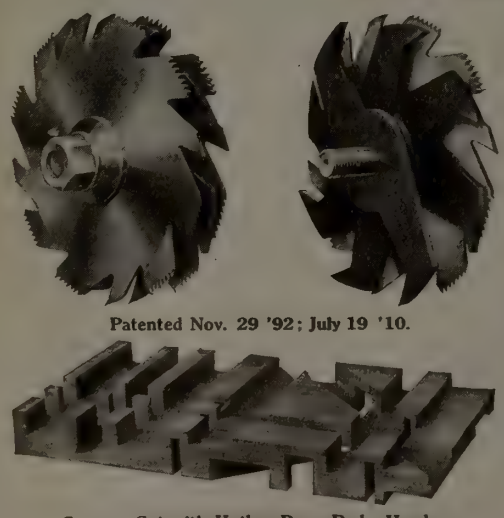

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100 Rooms, Private Bath, $2.50 Single, $4.00 Up Double.
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All Absolutely Quiet

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A UNIVERSAL PURPOSE RESAW whose wide range of duty is rendered economical by reason of its exceptionally convenient and easily operated control devices —all concentrated at operators position and ***reduced to the least possible number.***

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Advertisers will receive careful attention and liberal treatment. For manufacturing and supply firms wishing to bring their goods to the attention of owners and operators of saw and planing mills, woodworking factories, pulp mills, etc., "The Canada Lumberman and Woodworker" is undoubtedly the most direct and profitable advertising medium. Special attention is directed to the "Wanted" and "For Sale" advertisements.

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With the disappearance of the Shell Committee and the creation of an Imperial Munitions Board to take its place the public will hope for clean management of the whole business in future. We join heartily in this hope, but we want to see something still more radical. We want the whole situation investigated, and we will not allow the matter to drop as it stands to-day. Clean government and a square deal for everyone is the object we are aiming at, and we propose to pursue it to the end.

Exit The Shell Committee

Concerning the dead one should say nothing but what is kind, and we suppose that to some extent this is the proper attitude for us to take in connection with the Shell Committee. We have indeed a striking example of kindly reference to the late Shell Committee in the remarks made by Mr. Lionel Hitchins—remarks which have almost the true ring of a funeral panegyric, but which unfortunately leave also a great deal to be inferred. Getting down to plain facts we have now to record that the British Government lost faith in the Shell Committee, which was an agency of the Canadian Government, and decided to supersede it by the appointment of an "Imperial Munitions Board." Everyone in Canada who desires to see Canada do its share in the war efficiently has been relieved by the change. Under the Shell Committee we were going rapidly from bad to worse and apparently no one knew how to apply the brakes. Now, we may hope that the giving of contracts for shells and for shell boxes will be worked out upon a better basis and that we will have nothing further of which to be ashamed. That at least is how the Canada Lumberman and every good Canadian wants to see things worked out.

The composition of the "Imperial Munitions Board" is interesting. It has two outstanding features. Its chairman is Mr. J. W. Flavelle, head of the Wm. Davies Packing Company, a man of proven business capacity whose appointment may be considered as an outcome of the demand of decent Canadians for a strong man at the head of such an important body. The deputy chairman of the Board is General Alexander Bertram who was formerly chairman of the Shell Committee. Until we have seen the actual and successful working out of the new Board we will not be able to feel that General Bertram's appointment was wise. It was against General Bertram's anomalous position as chairman of the Shell Committee and as head of one of the great munition producing firms accepting contracts from the Shell Committee, that much of the criticism was directed. The situation was in itself one of the chief causes of trouble. All of the dealings of the Shell Committee with General Bertram's firm may have been clean and above board, but no man and no Government in Canada ought for one moment to countenance such a conflicting combination of interests in the chairman of a Shell Committee. From the very first, General Bertram's interests as chairman of the Shell Committee must have been contrary to his interests as head of a large shell producing firm. We cannot, therefore, bring ourselves to believe that the inclusion of General Bertram as deputy chairman of the Imperial Munitions Board, is either wise or excusable.

In addition to Mr. Flavelle, and General Bertram, the Imperial Munitions Board is composed as follows:—Hon. David Carnegie (member of the former committee) G. H. Dawson of Victoria, B. C., C. B. Gordon, head of the Dominion Textile Company, J. A. Vaillancourt, president of the Bank of Hochelaga and E. R. Wood, a well-known Toronto financier closely connected with the MacKenzie and Mann interests. Sir Sam. Hughes is honorary president of the Board, thus supplying the connection between the Imperial Government, the Canadian Government and the Munitions Board.

In spite of our wish to say nothing unkind about the dead, we find ourselves obliged to make slight reference to the shell box matter because, since our last reference to it, official excuses have again appeared in print the object of which was to discredit what we have had to say and to question our motives in saying it. We think that the sincerity of our motives, the correctness of what we said and the necessity for saying it, have all been well vindicated by the action of the British Government in superseding the Shell Committee by the "Imperial Munitions Board." The attempts to excuse itself which were made by the Shell Committee were very feeble and call for only a little comment. None of the criticisms we offered have been refuted. Instead, the Shell Committee has sought to discredit our motives and to give the impression that we have political affiliations or other inducements to dictate our course. In more ways than one, the opposite to this is the case. That our motives are selfish is to some extent true, as we desire to see our friends who are well equipped for the production of shell boxes get the contracts instead of firms that are not equipped. We have been urged to take this course, however, chiefly by the unselfish desire to see Canada's reputation protected against the profiteer.

The Imperial Munitions Board has inherited a great task from an incapable predecessor. It has not only to look after the securing of munitions and munition cases, but to restore confidence in the way in which the business is being handled. We sincerely pray that it will be found equal to the task.

The Story of a Shell Box Contract

The disappearance of the old Shell Committee which has been superseded by the Imperial Munitions Board gives good reason for hoping that in future there will be no grounds for complaint in regard to the manner of letting contracts for the production of shells and of shell boxes. The change in the manner of attending to this work, however, does not in any way clear up the situation as it existed during the existence of the old Shell Committee. There has been so much criticism of the work done by the Shell Committee that an investigation is unquestionably necessary. While we have published very definite facts in regard to this in previous issues, and although none of our statements have been disproved, there is still no definite sign of an investigation into the letting of shell box contracts, so that we feel it advisable to relate the facts in connection with still another case.

In a certain Ontario town, which for the time being shall be nameless, a lumberman who operates a planing mill endeavored by correspondence to secure a contract for the production of shell boxes. He wrote to the Shell Committee and received, like so many other lumbermen, a reply to the effect that all available contracts were then let. In the same town there is a plant manufacturing a line of men's wear, the owners of which, and many of the employees, are staunch Conservatives. One of the employees, who has been engaged for many years with the company, and has risen to the position of a shipping or packing clerk, thought that he had a fair chance for getting a contract for shell boxes. He had no plant, however, and no experience in this kind of work, so, for a time he was at a loss as to how he should set to work to get a contract. About that time he met an acquaintance who knew something of the business and he asked him what he should do. He was told that if he wanted a contract the only way it could be obtained would be by going to Ottawa and seeing the Shell Committee. He followed this advice, went to Ottawa, waited his turn for two days and returned with a contract.

The next thing to be done was to produce the goods. Work was immediately started upon a small plant. This was constructed quickly enough, being a frame building of two storeys. Machinery was obtained and installed, and before long the plant was turning out boxes. The cost of the plant was in the neighborhood of $5,000 including building, equipment, etc. The plant has been running night and day since it was ready for operation, and quite recently finished shipping the stock covered by its first contract. Early in December a further contract was secured for a good amount of boxes, considering the size of the plant. The firm is going ahead now upon this order.

One of the important facts in connection with this affair is that the man who secured the contract would not naturally be considered by ordinary business men as of sufficient financial standing to obtain the necessary credit for the erection and equipment of such a plant, or for the purchase of the lumber required. The inference is that his employers have backed him up in the undertaking, thus establishing his credit. The name of the man who has the contract does not appear in Bradstreets, because formerly he has not had any business of his own which called for a financial rating. In short, the case is one of a contract being let to a party without plant or equipment, without previous financial standing, without experience, without everything that is essential in such cases, except some knowledge of how to get the contract. The giving of a contract to a party like this could only be justified under one condition, namely, that every other available plant in Canada was already producing shell boxes to its utmost capacity. The only experience this man could possibly have had from a practical point of view in connection with boxes was that secured in the course of his daily occupation of packing goods for his employers. We have made enquiries, however, and find that his employers make most of their shipments in cardboard boxes and that such wooden boxes as they are using are secured in shook form and are nailed together at the plant when required. There is nothing whatever in this kind of work that would fit a man to understand the practical end of making shell boxes. Yet a shipping clerk has been able to secure contracts while men with good equipment in the same town have been unable to do so.

One would have expected that after securing this contract the man would have devoted his time to carrying it out, but apparently this is not necessary for he still retains his former position as a shipping clerk and whenever possible spends his spare time at the shell box plant. The Shell Committee stated that their policy had been to spread these contracts out among the "little fellows" as much as possible so as to do the greatest amount of good, and we were at a loss for a time to understand just what this meant or what its real object could be. We think we understand it fairly well now.

Railroad Charges Require Perpetual Checking Up

Keeping tab on railway tariffs relating to the movement of lumber is a pretty important and at the same time a pretty extensive business. Although we have frequently called the attention of our readers to the matter of allowances on box and flat cars, which varies according to the season of the year, it is important to refer to the situation again because of the change which comes into effect annually on December 1st. Throughout the year, shippers are entitled to an allowance of 500 lbs. on box cars. From May 1st to November 30th the allowance on flat cars is 1,000 lbs. From December 1st to April 30th the allowance on flat cars is 1,500 lbs. Shippers and consignees should see that the full allowances are given in every case.

Unfortunately there is something about railway companies which makes it necessary to keep a much closer eye upon their charges than upon the charges of most other business bodies. Why they should not be governed by the same sense of fairness as other business institutions, we cannot see, but the fact remains and must be accepted, and shippers and consignees must therefore be more watchful against improper charges for transportation of their products than they are against over-charges in connection with other branches of their business.

Co-operation between shippers and receivers of goods will go a long way towards simplifying the matter. Every receiver of goods is entitled to receive on his advice note for instance, full weighing particulars, showing gross, tare, allowance and net weights. These should be insisted upon because cases are continually coming up where railway companies attempt to collect on far larger weights than they are entitled to. The railroad agent in these cases simply makes a guess at the weight, and we have yet to hear of any important cases in which the agent has guessed too low. How many cases get by without complaint being made, thus resulting in the railway company collecting more than it should, no one can say, but unquestionably these cases are numerous

Take for instance the following case. The weights in connection with a certain car shipped to a firm in Western Ontario were as follows:—Gross 75,980 lbs., tare 36,400 lbs., allowance 500 lbs., net weight 39,080 lbs. The car contained 16,275 feet of lumber the average weight of which was 2,407 lbs. per thousand feet. Without presenting particulars of the weights the railway company billed the car at 50,000 lbs. Correspondence which passed between the shipper and the railway company indicated very strongly that the agent of the railway company must have known at the time when he was attempting to collect on 50,000 lbs. that the actual weight was only

39,080 lbs. Had the shipper not been right on the job the railway company would have collected for the larger quantity, even though it knew that it was not entitled to it. Another case which the same firm had to handle was one in which the railway company charged for 45,000 lbs. and insisted upon this being the weight. After considerable correspondence, however, the company finally admitted that the weight was only 35,800 lbs. There is only one way in which to prevent the railway companies from taking money which they have no right to and that is to watch them all the time.

Elsewhere in this issue we have published a news report regarding a change in G. T. R. tariffs which will come into effect on January 3, 1916, and which is important to many of our readers. This is a special freight tariff covering re-shipping and stop-off arrangements at Sarnia Tunnel, Ont., on lumber,, shingles, timber, and other forest products, in carloads, originating in British Columbia, routed in Chicago, Chicago Junction or Milwaukee and destined for points in Ontario, Quebec and the Maritime provinces, consigned to Sarnia Tunnel "for orders." Shipments of this nature "for orders" will be forwarded to final destination under the new tariff at the through rate from the original point of shipment plus a stop-off charge of $1 per car for each 24 hours or part thereof during the first two days and $2 per car for each 24 hours or part thereof during each succeeding day.

Charges of a similar nature were instituted recently by the C. P. R. in connection with grain for Cartier, Ont., from the Canadian Northwest. The G. T. R. extended this to cover grain shipments to Sarnia Tunnel and they now intend to make it cover lumber and forest products. The idea of the railway companies in connection with grain was to assist in the expeditious shipment of the enormous western crops. The extension of the principle to shipments of lumber and forest products seems to us to be uncalled for and ought to be well examined by lumbermen with a view to taking such steps as are advisable to lay the matter before the Dominion Board of Railway Commissioners.

Toronto Securing Timber Test Data

There has always been more or less criticism among the lumber trade in Eastern Canada arising out of the vast quantities of southern pine that are used for construction purposes, where Canadian timbers would be equally or more serviceable. We have drawn attention to this subject frequently, but have found in most cases that the law of supply and demand has been so strong that such efforts as the lumber trade were able to make were of little avail in securing for Canadian products the share of the market that their importance and value would warrant. We are pleased to notice now, that the question is being taken up in Toronto from the other end of the market, that is to say, that the city architect has approached the lumber trade by means of a circular and has expressed a desire to remedy this evil as much as possible.

The most significant fact brought forward by the city architect in his circular letter to the lumber trade is that he has on file in his department very little information regarding the results of tests of Canadian timbers. He suggests that the lumber trade should co-operate with the department in order to secure tests of this nature, which would definitely place Canadian timbers in their proper position. We believe that the lumber trade in Canada will unhesitatingly approve of this idea and that if it is carried out properly a great deal of benefit will result, not only to producers and sellers of Canadian timber, but also to those engaged in the building business.

The building by-law in the city of Toronto at present allows a fibre stress for Douglas fir and for Georgia or long leaf yellow pine of 1,600 pounds per square inch. We believe that this is not fair treatment to Douglas fir. Such figures as we have on hand which show the results of tests are very decidedly in favor of Douglas fir, showing that it should be allowed a higher fibre stress than Georgia pine.

This question came up some eight years ago in Toronto and was given a very interesting test which should have furnished the city architect with data such as he is now requesting. For the benefit of those who have kept the information then secured we reproduce it in brief form. The test was carried out at the School of Practical Science, Toronto, for the Boake Mfg. Company of Toronto. For some time past there had been discrimination by the city architect in favor of Georgia pine. It was said that this discrimination was based upon statistics secured from results of tests previously held at the School of Science. For this season Mr. Boake and a number of other Toronto lumbermen thought they would try to settle the matter once and for all, so far as Toronto was concerned. Accordingly two beams were secured, one of B. C. fir and one of Georgia pine, each about 19 ft. x 19¾ in. x 8 in. These were placed in the testing machine at the School of Science with the 19¾ in. edge vertical, the end supports being set 18 ft. apart. The load was then applied at the centres of the beams.

When the load reached 55,320 pounds the Douglas fir beam cracked partially, lengthwise, the upper section projecting half an inch beyond the lower. Still it remained steady and to all appearances would have easily supported an even greater load. The Georgia pine beam failed absolutely under a load of 43,550 pounds by breaking in the centre immediately under the weight, not longitudinal only, but transversely as well.

The result of this test was a very definite proof that Douglas fir for heavy construction will not only support a greater weight than Georgia pine, but even when pressed to breaking point will not snap off, but merely bend or crack in a longitudinal direction. Prof. Riddell of the School of Practical Science reporting upon the test said:—"The beam of Douglas fir failed under a load of 55,320 pounds, by shearing along the neutral axis, there being also slight indications of failure on the tension side. This ultimate load of 55,320 pounds corresponds to a shearing stress along the neutral axis of 263 pounds per square inch or a fibre stress at the lowest point of the tension side of the beam of 5,744 pounds per square inch.

"The beam of Georgia pine failed under a load of 43,550 pounds by breaking on the tension side. This load corresponds to a modulus of rupture in tension of 4,522 pounds per square inch."

The superiority of Douglas fir is very definitely shown by the above test. Other tests which have been made also bear out the same conclusion. According to information published by the Forest Branch of the Department of Lands of B. C. based upon a large number of tests, the average modulus of rupture per square inch for Douglas fir, grade one, is 6,919 pounds and for long leaf pine 6,140 pounds. The average fibre stress at elastic limit per square inch for Douglas fir, grade one, is 4,402 pounds and for long leaf pine 3,734 pounds.

In addition to the above data it is also important to consider that Douglas fir is considerably lighter than long leaf pine, making it a much more economic timber to handle. The weight per cubic foot of oven dry Douglas fir was found during the above tests to be 28 pounds, while that of long leaf pine was 35 pounds. Douglas fir is 22 per cent. lighter in weight than the next best softwood structural timber. There should be no difficulty, if the matter is properly followed up, in securing for Douglas fir its proper consideration as a building construction timber in Toronto. While this is being done it will be well also to consider the cases of other important Canadian timbers, so that the city architect of Toronto, and the authorities in other cities, towns and villages throughout the country may be well posted upon this subject. If Toronto lumbermen will take the matter up we believe that their example, coupled with the information they will be able to bring to light, will go a very long way towards removing the unfavorable treatment which has been accorded to Canadian timbers in the past.

Sarnia Stop-Off Charges Increased

G. T. R. Issues New Tariff Regarding Shipments from British Columbia to the Tunnel "For Orders"

Many lumbermen will be affected by a new tariff which will be put into effect by the G. T. R. on January 3rd, 1916, in connection with shipments of lumber, shingles, timber, etc., in car loads from British Columbia, routed via Chicago, Chicago Junction or Milwaukee and destined to ports in Ontario, Quebec and the Maritime provinces, consigned to Sarnia Tunnel, Ont., "for orders." The tariff is known as G. T. R. tariff, C. R. 213, C. R. C. No. E 3300, cancelling C. R. 87, C. R. C. E No. 1989 effective January 3, 1916. This is a special freight tariff covering re-shipping and stop-off arrangements at Sarnia Tunnel, Ont., on shipments originating and routed as above described. The tariff reads that:—

Shipments consigned to Sarnia Tunnel "for orders" will be forwarded to final destination at the through rate from original point of shipment, plus the following tolls:—

(a).—"Stop-off" charge ... ...$1.00 per car

(b).—"Car Rental" after the expiration of the first 24 hours ... ...$1.00 per car for each 24 hours or part thereof up to and including 72 hours.

(c).—"Track Storage" after the expiration of 72 hours:

For the first 2 days ... ...$1.00 per car for each 24 hours or part thereof.

For each succeeding day ... ...$2.00 per car for each 24 hours or part thereof.

These charges will work out as follows:—

Period	Stop-Off	Car Rental	Track Storage	Total
24 hours	$1.00			$1.00
48 "	1.00	1.00		2.00
72 "	1.00	2.00		3.00
96 "	1.00	3.00	1.00	5.00
120 "	1.00	4.00	2.00	7.00
144 "	1.00	5.00	4.00	10.00
168 "	1.00	6.00	6.00	13.00

The amounts shown under the heading "Track Storage" cover the proposed increase in charges for the periods shown.

Some little time ago the C. P. R. proposed that the charges for stop-off on grain and grain products from the Canadian Northwest should be advanced at Cartier, Ont., and shippers assented to this as it would probably expedite the shipment of the enormous western grain crop. The G. T. R. extended this advance to Sarnia Tunnel also on grain and grain products from the Northwest, but they now seem to have further extended the principle to apply on lumber and forest products at Sarnia Tunnel.

Canadian Lumbermen's Association Annual January 19th

At an executive meeting of the Canadian Lumbermen's Association held in Ottawa on December 6th it was decided that the annual meeting of the Association should take place on Wednesday, January 19, 1916, instead of the first Tuesday in February as in former years. The banquet will be held on Wednesday evening. The Association is joining with the Commission of Conservation which is holding its meetings on Tuesday and Wednesday, January 18 and 19, and the Canadian Society of Forest Engineers whose annual meeting will probably be held on Tuesday evening, January 18th. On Thursday, January 20th, the annual meeting of the Canadian Forestry Association will be held. These meetings will bring together a number of prominent lumbermen from all parts of Canada and are certain to be both profitable and enjoyable.

Canadian Purchasers for the French War Office

Mr. Philippe Roy, General Commissioner for Canada, Paris, advises the Department of Trade and Commerce that an order has been issued by the War Department of the French Government to the effect that all purchases made by the Supply Branch in Canada will pass through the Hudson Bay Company. Canadian producers should therefore submit their future offers through the office of that company at Montreal. It is further stated in Mr. Roy's communication that Canadian lumber, steel and meat will find in France an important market for years to come, but it is necessary that Canadian firms should have in Paris representatives entrusted with the necessary authority, especially if it is desired to secure Government contracts.—Weekly Bulletin.

Death of Frederick W. Powell

Frederick W. Powell, president and manager of the Rideau Lumber Company, a well-known citizen of Ottawa, who was long connected with the lumbering industry of Canada, died recently at his home in Ottawa. Mr. Powell had been in poor health for over four years, although it was only during the past month or two that he had been confined to his house. His death has deprived Ottawa of one of its best citizens, and is a severe loss to the lumbering industry. Mr. Powell was a man of high ideals and possessed of a generous and sympathetic nature which endeared him to a wide circle of intimate friends. He was born at Saratoga, N. Y., 65 years ago, and educated there. For many years he was manager of the branch of the Rathbun Company of Deseronto, Ont., in Saratoga. In 1880 he went to Ottawa as manager of a branch of the company in that city and had resided in Ottawa ever since. In 1897 he organized the Rideau Lumber Company, of which he was president and manager. The late Mr. Powell is survived by his widow, a step-son, Mr. Guy M. French, one brother and one sister.

William Gidley, Victoria, B. C. Passes Away

Wm. Gidley, of Victoria, B. C., well known among the lumbermen of the Pacific Coast, died recently after an illness of seven weeks. The late Mr. Gidley was born at Eggbuckland, Cornwell, England, 71 years ago. He was brought to Canada as a boy and settled in Ontario. From his earliest years in business he was connected with the lumbering industry. He was engaged in lumbering in Eastern Canada for some thirty years. When the Cowichan Lumber Company of Duncan, B. C., opened up interests on Vancouver Island some twenty years ago, he was sent out to manage them. His first work on the Coast was at the Genoa Bay mill, which he continued to manage up to the time of his death. Few lumbermen on Vancouver Island were better known than the late Mr. Gidley. Mr. Gidley is survived by his wife, four daughters and two sons, one of whom is now at the front.

New Brunswick Lumberman's Death

The death occurred recently of James Reid of Charlo, N. B., M. P. for Restigouche County, a prominent citizen of Eastern Canada and widely known among the lumbermen of New Brunswick. Mr. Reid was born at River Charlo, Restigouche County, N. B., on November 14th, 1839. As a lumberman and general merchant he was very successful. He had represented Restigouche County in the House of Commons for fifteen years and was a man of much public spirit. Mr. Reid is survived by two sons, John of Vancouver and James A. of Charlo.

Sudden Death of Guy MacCallum, Hartland, N. B.

Mr. Guy MacCallum of Hartland, N. B., who was well known throughout the province and took an active interest in the lumber business, died suddenly of heart failure recently. The late Mr. MacCallum was born in 1832 at Chipman, N. B., and was actively interested in operations on the St. John and Miramichi rivers.

The Late E. B. Foss

In the Canada Lumberman of December 1st we published a short report regarding the accidental death of Mr. E. B. Foss, Bay City, Mich. Further information which we have received is to the effect that Mr. Foss and Mr. Jos. Miksak, president of the Pilsen Lumber Company of Chicago, while driving in Mr. Foss' car were run down by a passenger train backing from the station to a bridge. The approach of this train was screened by the passage of a freight train. When the freight train had gone by, Mr. Foss, believing the track clear attempted to pass and ran his car directly in front of the backing passenger train. The machine was struck squarely in the middle by the rear coach and was rolled over and over along the track for a distance of nearly 100 feet. Both men were instantly killed and their bodies were terribly mangled.

The late Edgar B. Foss was born at Williamantic, Conn., on February 28, 1853, and had been a resident of Bay County, Mich., for over forty years, during all of which he had been engaged in the lumber business. After learning the business as an employee in several different companies, he went into business for himself and was successful from the outset. He became one of the leading lumber dealers and operators in Bay City, and owned sawmills in Canada and a large lumber yard and planing mill at Bay City, as well as a line of vessels carrying lumber from his Canadian mills to the markets. Mr. Foss was also the owner of extensive tracts of timberland in Canada and on the Pacific Coast. He was also extensively interested in coal mining.

McGill Forest Laboratories Opened

Formal Gathering of Prominent Business Men—Will Investigate Wood Waste and Utilization Problems

At the invitation of the Forestry Branch of the Department of the Interior and McGill University many representatives of the Government, McGill University, foresters, the lumber and pulp and paper industries, general commerce, railroads, and allied interests were present at the formal opening of the Forests Products Laboratories of Canada, University Street, Montreal, on December 3. The Laboratories, of which Dr. John S. Bates is the head,, have been doing research and practical work for many months, particular attention being given to the utilization of waste forest products with the object of preventing the immense destruction which is taking place in all parts of the country. In addition to this section, considerable time is given to scientific investigations into lumber, pulp and paper, and to the training of technical experts in the various departments—men who later find employment on the staffs of lumber, pulp and paper companies.

The guests were shown over the various laboratories and also visited the Engineering Building, McGill University, members of the staff of the Laboratories explaining the work of the institution and also the appliances used in investigating the products. At the laboratories there is now established a department in which is exhibited various woods, in log and cross sections, pieces of trees with fungi attached, specimens of wood treated and untreated with chemicals, timber treated by the Oxylene fire-proofing process used by the British Admiralty, and small clear test specimens showing typical failures.

In the Engineering Building the visitors saw tests made on several machines for testing mine timber in bending, mine props in compression, small specimens in compression, hardness test, and impact for testing small beams. The laboratories on University Street include the photographic, chemistry, creosoting, and pathological departments. The methods of slicing wood, generally into the 1000th part of an inch,, for mounting on films; the making of photomicrographs, in order to ascertain the nature of woods; the experiments on creosoting paving blocks, railroad ties, &c.; and the chemical products of wood were all explained. There is a separate building for experiments on pulp and paper, a complete miniature paper making machine having been installed. The machine turns out various grades of paper, and it was mentioned that the institution is the only place where Canadian blotting paper is made. Specimens of the paper were distributed. In addition there is a department for the chemical testing of pulp.

At a luncheon held after the inspection, Hon. W. J. Roche, who presided, stated that this was his first visit to the laboratories. He desired to make himself more fully acquainted with the work, so that at a future date, and when times were more favorable, he might be in a position to recommend extensions. The work had been started under his direction in 1913, and greater progress would have been made but for the war. He expressed graitification that the McGill University authorities had co-operated with the Government in the creation of this department, supplying the buildings and part of the brains and equipment, while the Government looked after the rest, and supplied the general machinery and upkeep—the whole being affiliated in a happy manner with McGill University. There had been great waste of forest wealth in the past, and it was the aim of this laboratory to discover better methods, so as to utilize waste products and get better results from others. Canada could learn a great deal from the United States and even from Germany, in the matter of utilizing these products, and we ought to learn from the experiments made there. The Laboratories would afford opportunities to manufacturers who found difficulties with certain processes to apply for investigation, and experiments would be made to see what was wrong.

Sir William Peterson who followed spoke of the pleasure with which McGill University co-operated with the Government in this work.

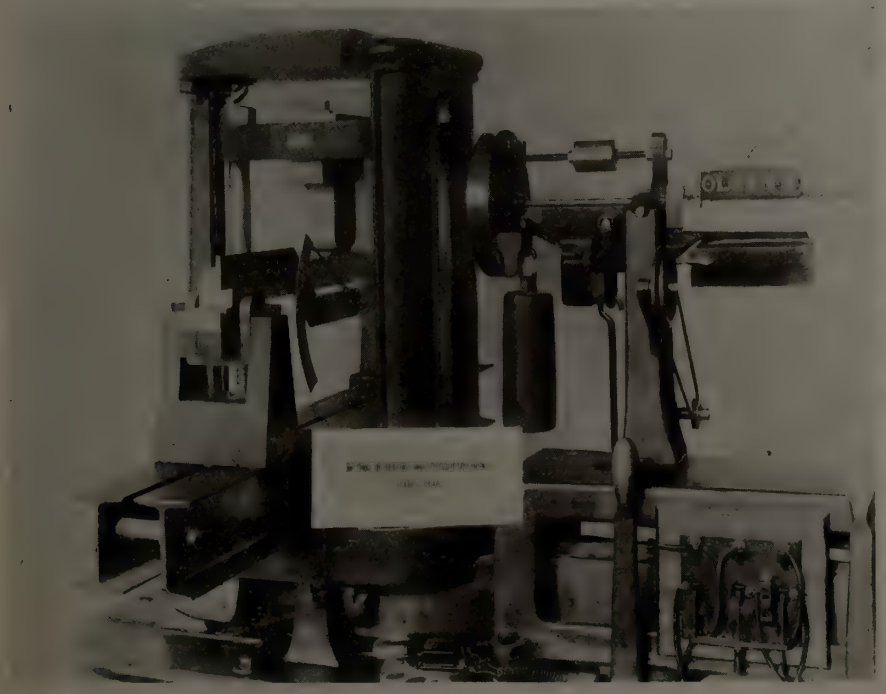
Hon. Sydney Fisher referred to the enormous waste in forest products, which the establishment of the laboratories would tend to stop, while, at the same time, it would open the way to new industries by the utilization of waste products. The Government were by this means aiding our forestry industries, and he congratulated Mr. Roche upon establishing the laboratories. Mr. Fisher also spoke in appreciative terms of the work of Mr. R. H. Campbell.

Dr. Hugh P. Baker, Syracuse University, New York, expressed pleasure at the progress made by the Forest Products Laboratories. Canada, he said, was making great strides in forestry work, and was profiting by mistakes made across the border. The United States several years ago began the testing of timber and investigation work, and the result was the establishment of a Government laboratory in Wisconsin. They desired to work hand in hand with the Canadian Government, as the problems to be solved were practically the same as those in Canada.

Mr. R. H. Campbell, Director of Forestry, Department of the Interior, Ottawa, said that in trying to save the forests it was incumbent upon the Government to use the products in such a way as to make them as economical as possible. In that way they would be doing as great a work as in saving the forests from destruction by fires and other causes. Canada was beginning to realize that in developing the resources of the country there must be additional knowledge of what was being done—the industries and materials must be developed on a basis of actual knowledge rather than on guesswork. The forestry wealth was still great in spite of the destruction that had occurred, and anything that could be done to conserve it would be of immense benefit in the future. He was glad to note the presence of Mr. William Little, who in bygone years had done much to initiate the movement for conserving forestry wealth.

Splendid Outlook in South Eastern, B. C.

A despatch from Cranbrook, B. C., states that the outlook for the lumber industry in South Eastern British Columbia is more reassuring now than it has been since the beginning of 1914. A fairly steady market has been developed on the prairies and regular shipments have been made by practically all mills since August. The general yard stock is estimated to have been reduced by one half during this time. Several lumbermen who have lately made extensive tours on the western prairies state that farmers are prosperous and are doing a considerable amount of buying.



Testing a Small Clear Specimen of Douglas Fir.

Pulp and Paper Department of Testing Laboratories.

In the Public Eye

A budget of comment on men and things of moment presented in the interest of public welfare, independent of party politics and with malice toward no one.

When we think of the part the love of money is making some of our first families play in this time of trouble we cease to wonder why the dollar mark is fashioned after the image of the serpent that entered the Garden of Eden.

* * *

A correspondent writes to ask what Sir Geo. E. Foster and his department of Trade and Commerce have been doing to improve the opportunities offered for the expansion of Canadian commerce by the war and the banishment of Germany from the markets of the world—Canada at least. And the answer comes without a moment's hesitation. Sir George has been making speeches. You must have noticed that, if you read the daily papers. Anyway, did you ever know him to be doing anything else? That is Sir George's forte.

* * *

When Sir Robert Borden came into power by virtue of a Liberal attempt to hitch this fair Dominion onto a foreign band-wagon, he found that the only cabinet legacy the old-time Conservatives had left him was the then Hon. Geo. E. Foster. He was the financial critic of the party, and in Opposition had been able to quote figures faster than the Liberal government could digest them. He was also the natural choice for Minister of Finance. But Premier Borden was well advised to the effect that a great critic is mighty little use for anything else. So he reached out, gathered in Tom White from the top of a trust company and almost from the ranks of the Liberal party, and made him Minister of Finance.

* * *

However, the Hon. Geo. Eulas was still on his hands. He could not think of anything he was really useful for—except making speeches—so he began to argue by opposites. "Friend Foster," he said to himself, "is a college professor. By training and education he is absolutely innocent of any knowledge of trade or business. Why not make him Minister of Trade and Commerce?" It was an inspiration. Hon. Geo. E. Foster became Minister of Trade and Commerce and he has held the job, or the job has held him, ever since.

* * *

Now, as Minister of Trade and Commerce, what would you expect Sir George to do when millions of munitions contracts were floating around the continent to which he occasionally belongs? Wouldn't you think he would inventory his factories, obtain concise information regarding their fitness and capacity for producing war supplies, and, in short, do everything in his power to bring together the buyers of supplies and the men who could manufacture them? Well, you're right; that's exactly what he did not do. Instead, he went about addressing recruiting meetings. Lloyd George had said this is a war of munitions rather than men. So Sir George figured: "Munitions, why they might have to do with my department. So I'll get out after recruits." Of course, he's such a nice warm-hearted genial chap that men rushed to arms in millions as soon as he asked them to. But that's neither here nor there.

* * *

About the reaching out for markets left vacant by Germany's inability to navigate anything save the Kiel Canal! Oh, yes, Sir George went about that in the same whole-hearted, soul-satisfying way. He kept right on making speeches.

* * *

Some day somebody is going to arise in parliament and ask: (1) How many trade opportunities have been developed for Canadian manufacturers by the Department of Trade and Commerce? (2) To what extent has trade in Canada been developed in the last ten years; how much of this development is normal and how much can be traced directly to the department? And then Sir George E. Foster will make another speech.

* * *

Lloyd George has evidently sized up the politicians of Canada from his earlier experiences in munition contracts and instructed his representative to handle them gently and with kid gloves. For latest reports from Ottawa are to the effect that a letter from Sir Robert Borden to Mr. Hitchens is the royal road to a contract. The English munitions man is also said to act as if to ruffle the temper of the Minister of Militia would be equivalent to insulting the whole Canadian people. Such is the reputation our politicians and their profit-grabbing friends have given a Dominion whose sons are comparing favorably with the best troops in the British Army and who are going to the front as fast as the motherland calls for them.

* * *

Corporations have no souls and consequently you could hardly expect them to have much patriotism. But the proposal that the Canadian government should impose a tax on war order contracts pre-supposes that the government is also without soul, conscience or patriotism. What would civilization think of a country that let war contracts for the motherland at extortionate rates of profit and then set about sharing in those profits? In other words, has Canada fallen so low that she would carry on her government with blood-money wrung from Britain? Let the tax on war contracts be imposed if a feasible method can be found, but let the money thus obtained be applied to buying those extra munitions it should have bought in the first place.

* * *

Wasn't it one righteous man that was required to save Sodom and Gomorrah? Doesn't it look to you as if one straight, honest, non-partisan man was required to save the government? Britain has Lloyd George, who has made munitions a business rather than a political perquisite. In the United States Pierpont Morgan has inventoried the factories and their capacities, and the man who can deliver the goods at the right price can get a contract. Is it not possible to place war contracts in Canada on the same basis? In this time of stress, when the Empire needs the united effort of all its people, I hate to be classed with the kickers. But wherever you turn it is the same cry of politics, pull and graft. There are the shell contracts, going to the favored few, the shell-box contracts, going to builders of dams, the contracts for uniforms going to the real estate men, the aged and decrepit horses bought in the east, the horses with abnormal appetites for hay in the west, strange tales of the Ross rifle and a faint echo from the submarines on the Pacific coast. The official investigator, Judge Davidson, a Borden government appointment, can't find time to make a report on one before he is hurried off to look into something else.

* * *

Britain will, as usual, muddle through the war, but whether the government of Sir Robert Borden will do likewise depends on whether it sees the error of its ways and finds a strong man to bring order out of chaos and reduce to business only this strange medley of business and politics. I am not prepared to see this fair Dominion handed over to the party who vainly tried to sell its heritage for a mess of Buffalo bologna. But the day of reckoning is coming, and Sir Robert Borden, if he would not share the fate of the doomed cities of ancient days, had better get busy and find his one righteous man—and having found him make him Minister of Munitions.

* * *

The death of Sir Charles Tupper brings forcibly before us the immense strides Canada has made within the years of one man's life. The "fighting doctor" had reached middle age when he helped with confederation; before the first transcontinental railway had begun to stretch its steel across the prairies or borrowed its first dollar from the government. The great west was a frozen fringe on the border of civilization fit only for trappers, Hudson Bay factors and other fur-bearing animals. Yet he lived to see those prairies producing hundreds of millions of bushels of the finest wheat in the world and great statesmen like Clifford Sifton and Bob Rogers; served by three transcontinental railways paid for by the government and owned by private corporations; sprouting real cities with real business and other cities with real estate booms; and grain growers' associations and elevator combines and all the other decorations that prosperity and politics could give to a young but husky country. He lived to see Sir Wilfrid Laurier make Canada a nation and then try to tie it up to an alien country with a reciprocity treaty. Yes, he lived through all this nor did he die before he saw the Canada that gave him birth standing shoulder to shoulder with the Empire he loved in the long threatened fight against the military despotism that threatened the freedom of the world.

* * *

An interesting lecture delivered before the Canadian Club of Toronto by Mr. C. W. Barron, President Wall Street Journal, adds further interest to some quite remarkable figures recently quoted in that journal regarding Canadian war orders and war order profits. The Wall Street Journal is a recognized authority on financial matters, and Canadians will read these figures with increasing hope that the Government will take some early action re taxation of these war profits, from which might be made up a nice little sum towards further purchases.

For example, it is stated in the Journal that the Canadian Car and Foundry Company's business (of which a Conservative Senator is president) consists of a number of shell orders, part of which has been sublet at a profit of $2.30 per shell. The Journal figures that on this basis total profits from munition orders will yield this company well over twenty million dollars this year, or enough to pay interest on their bonds and leave a balance of more than 150 per cent. on the combined issue of preferred and common stock.

Again, the Dominion Iron and Steel Company are said to be running at a rate of earnings equivalent to about eight million a year—sufficient to pay all accumulated dividends and still leave 13 per cent. on the common stock.

The Steel Company of Canada is showing earnings at the rate of $500,000 monthly, and profits are running about 26 per cent. on the company's entire capitalization. The National Steel Car is understood to be earning at the rate of 40 per cent. on the common stock. The Nova Scotia Steel and Coal Company has just increased its capital by two and a half million "for the purpose of extending its scope for making further war orders." And, finally, Steel and Radiation, Sir Henry M. Pellatt, president, estimates a profit of $200,000 on a shell order which totals $380,000—an order which, according to the president, has since been duplicated—perhaps many times.

It is scarcely to be wondered at that one hears insistent reports that the British Government are placing themselves in a position, as rapidly as possible, to manufacture "at 'ome" all the munitions required.

* * *

Why should Sir Robert Borden consult Sir Wilfrid Laurier as to the terms on which his government can prolong its lease of life? If that Government has been doing its duty no Opposition could bring on an election at a time like this without courting sure defeat. If it has not been doing its full duty then Sir Robert should make his explanations to the people and not to Sir Wilfrid Laurier.

* * *

That bulwark of Conservatism and sometime mouthpiece of the Borden Government, the Mail and Empire, gets staidly to its feet to remark:

"In Canada we know only too well that most makers of munitions and furnishers of other war supplies to the Canadian and British governments have striven to get large profits out of their contracts. Mr. David Thomas, Lloyd George's representative on munitions, who was in Canada recently, said that he had an offer from a Hamilton manufacturer to make a great quantity of shells at cost. This was most praiseworthy and in striking contrast to the attitude of the general run of 'profiteers.' "

Of course you cannot expect the Mail to go further and tell that the Hamilton manufacturer's offer was not even considered by the Shell Committee. Still an admission such as the above coming from a Conservative organ should convince Sir Robert Borden that the mystery surrounding the shell contracts is bringing protests from the stalwarts of his own party. If the Premier was not quibbling when he promised a searching enquiry into all war expenditures he will turn his official investigator, Sir Charles Davidson loose on the Shell Game and the Purchasing Committee. The horse and horse feed scandals have been keeping him busy too long. It is time he was getting after the larger game.

* * *

Sir Robert Borden must have heaved a great sigh of relief when Mr. Hichens pronounced those few kind words that served as the obituary of the Shell Committee. For each day brings forth fresh evidences of the peculiar brand of patriotism that characterized its every action. We now hear of a publisher who has been awarded a shell contract. That he did not have a plant when the contract was secured apparently mattered not. Neither was it of any consequence that he knew not the first rudiments of making shells. He has evidently since secured at least a site for his shell factory as last week he was in the United States buying machinery.

* * *

I am not finding fault with those who had the necessary plant and machinery and were fortunate to secure contracts. What I object to and what manufacturers object to is the peddling out of contracts to middlemen and go-betweens while legitimate manufacturers have their machine shops standing idle. I can supply Sir Robert Borden with a list of machine factories whose owners have vainly tried to secure shell contracts. I can show him where men are now offering to sell their factories to the fortunate men who have secured shell contracts.

* * *

Fifteen British journals have refused to accept Ford advertisements. They consider the Detroit car an alien enemy and refuse to do business with him. But up to the time of going to press not one Canadian paper has developed any symptoms of following suit. It is a notorious fact that our Canadian newspapers, with few exceptions, fail to recognize that they are under any obligation to their readers. They evidently figure that they give him a cent's worth of news for his copper.

* * *

The United States is not only gathering in all the munition orders in sight but is reaching out after the markets left open by Germany's exclusion from them. France too has decided that it will not always be war time and that after the Germans have been driven back across the Rhine the rebuilding of her industries will be the next great task. Even now she has a "machinery committee" in the United States composed of representatives of French agriculture, banking, commerce and industry. Each member is an expert in his line. They are observing, planning and inspecting. The buying will come after the war and it is estimated that their initial orders for machinery will amount to a billion dollars. Maurice Damour, Secretary of the Appropriations Committee of the Chamber of Deputies, who heads the committee, explains its objects as follows:

"We want to effect a general modernization in all French commercial, industrial, and agricultural lines. With our population reduced by war we will be compelled to equip our factories with modern machinery. The money that we spent in Germany for that purpose will be spent in the United States. The figure of $160,000,000 a year is small compared to what will be spent in the future, because the machinery of northern France has been destroyed, and as the Germans withdraw they will leave little that can be used by us. We shall eventually buy every kind of machinery, agricultural implements, tools, hardware, spinning machinery, and mining machinery. In return we want the United States to buy the manufactured output that the United States formerly bought from Germany, our toys, for instance."

This is ample evidence that America's work in the near future is to rebuild Europe. By America I do not mean the United States but the North American continent, of which we, so humbly, form a part. What share is Canada going to take in the rebuilding? What steps are being taken to ensure her a reasonable part of the enormous business that is bound to come from that rebuilding? Is the French Machinery Committee going to visit us or is it to be allowed to sail for home under the impression that the Dominion produces good soldiers but mighty little else? Is our Minister of Trade and Commerce up and doing or simply up and orating? Is his department still busy producing blue books and trade reports or is it alive to the fact that trade for the future is of vastly more importance than reports of the past? Our business at present may be war. But if France, with the Huns within hailing distance of Paris, can still work out the future of her commerce surely Canada can spare Sir George Foster from the recruiting platform for long enough to get in touch with the French Committee and see if it cannot purchase some of its machinery from the people who are helping to drive the invader out of its country.

* * *

The resignation of the reverend editor of The Globe recalls the high hopes entertained by lovers of clean politics when, many years ago, it was announced that Dr. J. A. Macdonald would henceforth direct the destinies of one of Canada's most prominent dailies. With the prestige of the "cloth," backed by one of the most powerful religious organizations in the world, it was surely not too much to expect that Mr. Macdonald would now make himself heard in favor of clean government and in defence of his readers—the public. The "barnacles" continue to "stick," however, in comfort, and the public continue to be duped with the fox-farm and oil-stock advertisements—just like the other big dailies print. It was a splendid harvest that lay spread before him, and an efficient organization of harvesters was at his disposal. That he neglected to reap even a small portion will ever remain a keen disappointment to all honest electors.

"SEARCHLIGHT."

May Buy Canadian Portable Houses

French "Comite du Secours National" Intimates Desire to Secure Low Cost Dwellings in this Country

A letter recently received by Wm. H. Price, M. P. P., Toronto, from Philippe Roy, General Commissioner for Canada in Paris, France, makes an interesting reference to the possibility of securing in Canada portable houses for use in the devastated portions of France. In the course of his letter Mr. Roy says:—"I am sending you a report on the scheme which the 'Comite du Secours National' of France has in view to provide temporary shelter to the population of the districts which have been devastated by the Germans.

"From a material, as well as a moral, standpoint it is of the utmost importance to act promptly, in order to permit the residents of these centres to return to their districts and build up their homes. The 'Comite du Secours National,' in conjunction with the departmental authorities in the North and East of France, have examined the problem and asked themselves if they could not find in Canada portable houses at a price sufficiently low to allow the purchase of several thousands.

"Could you not, upon your return to Canada, examine this question with a few of your friends and let us know at the earliest possible date the result of your inquiry in this connection? You will recall that the general Secretary of the 'Comite du Secours National,' Mr. Jaray, laid his views before us, and even told us that if ready-made houses of this kind could be secured in Canada for 500 francs, provided the cost of transportation was not too high, he believed that the 'Comite du Secours National' and the authorities of the French Departments would probably order from 25,000 to 50,000. Naturally, this is not official and definite, but these figures will show you the importance of the scheme which we have in view.

"I count upon you to carry this matter to a satisfactory conclusion, as I know that your recent visit to France has inspired you with great sympathy, which will induce you to join us in tendering to France the assistance of which she is in such need."

Angus E. McLean, son of Angus McLean of the Bathurst Lumber Company, Bathurst, N. B., was married recently to Miss Gladys E. Beam, daughter of Mr. B. H. Beam of Bathurst. After a southern wedding trip Mr. and Mrs. McLean will reside at Bathurst, N. B., where he is connected with the Bathurst Lumber Company.

City Architect Co-operates With Trade

Secures Appointment of Lumbermen's Committee to Assist in Giving More Consideration to Wood in Toronto's Building By-law

At the meeting of the Lumbermen's Section of the Toronto Board of Trade on December 3rd Mr. W. W. Pearse, city architect of Toronto, delivered an address upon the situation in connection with the Toronto Building By-law and the regulations which it includes regarding the use of wood as a building material. Mr. Pearse stated that he was desirous of securing as much information as possible regarding the strength and durability of various kinds of wood, in order to enable him to give them their proper consideration in the Toronto Building By-law, which is to be revised in the near future.

Mr. Pearse prefaced his remarks by stating that he had received a letter in October from the Government at Ottawa advising him that the Commission of Conservation were studying the question of the comparative strength and durability of timbers. He had naturally been much pleased to learn this and had written asking them for such data as they then had. He had been disappointed, however, because the reply received included the results of tests, practically all of which had been made in the United States. He was convinced that in order to do justice to Canadian woods, and in fact to place the whole matter upon a proper basis for use in Canada, tests should be made in Canada upon the actual woods used in Canadian buildings. These tests moreover should be not only for strength, but also for durability. The city architect's department was particularly desirous of giving proper consideration to Canadian woods. Under the present By-law the chief Canadian timbers was permitted a higher fibre stress per square inch than in any other city on the continent, Douglas fir for instance, in Chicago, was allowed 1,300 lbs. per square inch, in San Francisco, Minneapolis and St. Paul 1,200 lbs., and in Toronto, 1,600 lbs. Formerly the allowance in Toronto was not so high, but since Mr. Pearse had assumed office he had introduced a special ruling increasing the allowance to 1,600 lbs. Long leaf yellow pine was given the same allowance as Douglas fir in the cities already mentioned. Short leaf yellow pine was allowed 1,000 lbs. per square inch fibre stress in Chicago, and 900 lbs. in Syracuse. It is not tabulated in the Toronto Building By-law. Norway or red pine in Cleveland was allowed 1,250 lbs. per square inch fibre stress. In Toronto the allowance was 1,200 lbs., and in Chicago 800 lbs. It was not tabulated in any other city. White pine in New York was allowed 800 lbs., in Chicago 800 lbs., in Boston 1,000 lbs., and in Cleveland 1,200 lbs. By Mr. Pearse's special ruling it is allowed 1,100 lbs. in Toronto. Spruce in New York is allowed 800 lbs., and in Boston 1,000 lbs. In Chicago and Cleveland it is not tabulated. In Toronto the allowance is 1,100 lbs. Hemlock in New York and Chicago is allowed 600 lbs., in Cleveland and Baltimore 1,000 lbs., in several other large American cities 600 lbs., and in Toronto, by Mr. Pearse's special ruling, 1,000 lbs.

Mr. Pearse thought therefore, that comparatively speaking, the fibre stresses allowed on these woods in Toronto were very fair. He laid stress upon the fact that the work of his department in this connection was confined to protecting citizens against unsafe buildings. It was his duty to see that whatever kind of wood was used the stresses permitted were safe ones. As to the varieties of woods used that was a matter to be determined by the architects and the owners of houses. If lumber merchants desired to reduce or eliminate the competition of any particular classes of wood, that was a matter for them to try and regulate by having tariffs introduced which would discourage the importation of foreign products. So far as the city architect's department was concerned this was a matter entirely outside of its jurisdiction.

Advantages of Mill Construction

Mr. Pearse then spoke briefly of the difference between mill construction and reinforced concrete construction. He remarked that it was an interesting fact that in most of the cities in the United States, mill construction with sprinkler protection was given a better rating by the fire underwriters than reinforced concrete construction. In Chicago and in the States generally the insurance rate upon a mill constructed building was 12c. and the rate upon the contents 20c. In the same cities the rate upon a reinforced concrete building was 40c. and upon the contents 80c. The reason for this was that when fire destroyed or injured the surface concrete it could not be replaced. New concrete could not be put upon old concrete. Therefore, the buildings had to be torn down and the tearing down was a very costly performance.

Discussing the heights of buildings Mr. Pearse referred to the allowance in Toronto. In dwellings, stables, garages and sheds, where frame walls are included the by-law allows a height of 35 feet, and where the buildings are of ordinary construction with brick, and frame interior the allowance is 70 feet. In apartment houses, tenement houses, lodging houses, rooming houses, hotels, colleges, dormitories, hospitals, asylums and institutions for the care or treatment of persons, the allowance for ordinary construction, brick walls and frame interiors is 35 feet. In public schools and separate schools the allowance is 55 feet. In factories, warehouses, office buildings, retail stores, dairies, etc., the allowance for ordinary construction with brick walls and frame interiors is 70 feet and where frame walls are included 35 feet.

He thought, taking everything into consideration, that wood in general was given very fair treatment in Toronto. Nevertheless he quite realized that as the by-law was to be revised the opportunity was an important one for securing the ideas and the information of all those interested in connection with various building materials. He had already secured important information from all the manufacturers of brick used in Toronto and it would be of great assistance to him if he could secure corresponding information regarding the strength and durability of the various classes of wood which are used in Toronto buildings. He would appreciate it greatly, therefore, he said, if the Lumbermen's Section of the Toronto Board of Trade would appoint a committee to work with him and assist him in securing the necessary data. He would then be in a good position to see that proper consideration was given to wood in the new by-law.

Mr. Pearse's address was attended to with great interest by a large number of lumbermen who were present at the meeting, and many questions were asked. Finally a committee was appointed consisting of Messrs. J. B. Reid, G. W. Boake, W. B. Tindall, A. E. Eckardt and F. H. Turner, in accordance with Mr. Pearse's suggestion. In reply to a question Mr. Pearse announced that his request for a timber testing machine had been passed by the city and the money was available. He hoped that it would soon be installed.

Inspection Staff Incapable

Mr. W. J. MacBeth asked Mr. Pearse if the Architect's Department was not loaded up with a staff of inspectors appointed through aldermanic influence which handicapped it in its work. Mr. Pearse replied that when he took office he was asked to turn in a report upon the reorganization of the whole work of the department and his recommendations were all put into practice with the exception of one item, and that was a recommendation that the inspectors should be appointed according to the results shown by civil service examinations.

In conclusion Mr. Pearse presented a number of letters which he had received from Toronto architects who, according to press reports, had been credited with stating that Mr. Pearse was giving preference to United States woods in Toronto buildings. These letters in each case showed that the reports had been absolutely unfounded and that Mr. Pearse had been thoroughly impartial in regard to the various classes of wood, merely doing all he could to see that whatever wood was used the buildings were constructed so as to be absolutely safe.

At the meeting of the section a week previous an interesting address was delivered by Mr. F. H. Turner, of the Royal Canadian Institute. Mr. Turner explained the objects of the Institute, one of which was to establish a bureau of research by means of which manufacturers and business men in Canada could secure practical information upon their problems. The question of the strengths of timber was one which such a bureau would be specially fitted for taking up. Mr. Turner's enquiries had led him to the conclusion that, in order to secure the necessary information for the use of the city architect in connection with the strengths of various timbers, it would be necessary only to obtain information already published as the result of tests made at the Forest Products Laboratory at McGill University, at a similar institution at Madison, Wis., and other data published both in the United States and Canada. This information was already available and could be tabulated so as to be available for the lumbermen and the city architect of Toronto.

Mr. Frank Hawkins, secretary of the Canadian Lumbermen's Association, Ottawa, was present at the meeting addressed by Mr. Turner and accepted an invitation to be present at a future meeting and give an address upon the work of the Canadian Lumbermen's Association, with special reference probably to its credit report system.

Important Mechanic's Lien Finding

Sale of Property Deprives Material Men of Payment — Liens not Filed in Time—New Owner not Liable

An important judgment has been given by R. S. Neville, K.C., official referee in the Supreme Court, in the case of the Sterling Lumber Company vs. Jones et al. The question at issue was the right of parties supplying building materials, labor, etc., to collect for the amount of their claims, from a second party to whom the house had been sold by the original builder.

According to the judgment given by Mr. Neville, the plaintiffs sought to enforce a mechanic's lien for $243.31 against lands mentioned in the statement of claim. Other lien holders brought forth similar claims. These claims were all established in the usual way and Mr. Neville gives judgment for each against the defendant Jones. He adds that the plaintiffs would be entitled also to liens upon the lands "but for the fact that the lands were sold by the defendant Jones to the late James Oliver before any of the liens were registered."

"The real contest between the parties," the judgment continues, "is as to whether Oliver's purchase from Jones freed the property from the liens." The defendant Jones was the owner. He employed the various lien holders in the construction of his house or bought material from them. All the claims rested upon contracts or orders given by Jones. "As the house was approaching completion," the judgment says, "one Coates, who was finishing the painting work, interested himself to sell the property, and brought Jones and Oliver together, and they made a contract by which Oliver agreed to purchase the property."

Oliver, who was ill at that time put the matter in his solicitor's hands for the completion of the purchase. Oliver knew that the building was only just being completed. In fact when the contract was signed there was still some varnishing and painting of verandah floors to be completed by Coates. Mr. Oliver placed the matter entirely in his solicitor's hands, except for one incident, namely, that he told his solicitor that Coates would report when the house was complete, and that that would be satisfactory. Mr. Neville states in his judgment that this was all Oliver ever employed Coates to do, so far as carrying through the purchase was concerned.

The judgment continuing states that the solicitor knew that contractors, material men and laborers, if not paid, would be entitled to liens and in carrying through the sale he had this in mind all the time. There were no liens registered however, and the solicitor endeavored to see that all claims were paid. It was represented to the solicitor that all claims were paid and that there were no liens or possible liens that might be registered. On July 3rd, 1914, Mr. Oliver's solicitor took a statutory declaration from the defendant Jones which said that he, Jones, was a builder and owner of the premises in question, that the premises were complete except the varnishing and painting of verandah floors and that that work was being completed at the time of the declaration. The declaration also said that all work and material was paid for and that there were no liens and no one was entitled to file any. If this statutory declaration could be relied on, Mr. Neville stated, it was clear that there were no possible claims against the property.

Mr. Oliver's solicitor registered the conveyance to Oliver on July 9th, 1914, and believed at the time that all claims had been paid. No liens were registered until the following month. Mr. Neville finds, in his judgment, that Oliver himself knew of no liens and his solicitor knew of no liens, also that Coates swore that he did not know of any other liens except his own and thought everything was paid for. It had been argued by the plaintiffs that Coates was Oliver's agent. Mr. Neville did not think that this was the case. He came to the conclusion therefore that Oliver was an innocent and bona fide purchaser for value fully believing that there were no liens against the property and was therefore entitled to hold the property freed of all liens.

The result of this judgment is that parties supplying material and labor, not having filed a lien, as they were then confident of securing payment, are now unable to collect, as the property was sold to an "innocent purchaser" before they placed any liens on file. The situation is a distinct hardship to the plaintiff, and it is not unlikely that they will appeal against the judgment.

Reindeer Make Good Foresters

An interesting new use for reindeer has been discovered by the Laurentide Company of Grand'Mere, P. Q. The company introduced reindeer in their limits a few years ago with the idea of using them in various ways in connection with their logging operations. Recently they found, in connection with lands which they had reforested that hardwoods were growing much faster than the young evergreens, and, unless checked in some way, would seriously retard the latter's growth. Having set out many thousands of young evergreens, the company were anxious to prevent them from being choked by the hardwoods. At first they tried placing goats upon the limits, expecting them to eat the hardwoods, but the tender young shoots of the evergreens were just as attractive to the goats as those of the hardwoods, and the plan was a failure. Subsequently the domesticated reindeer were turned into the limits. They were really to be used in the place of dogs for winter travel and other purposes. They were allowed to cruise on the plantation during the past summer, and it is now found that they have not eaten a single spruce or pine, but have cleaned off all the poplar, birch and maple, just as the company desired.

Employees Contributing to Patriotic Fund

Contributions to the Canadian Patriotic Fund have been placed upon a very practical basis by the Ross-Saskatoon and Baker Lumber Companies, of Waldo, B. C., as the result of a recent meeting. After discussing the subject, a form of agreement was drawn up and adopted, which is being placed in the hands of every employee in both mills, and in the bush camps, for signatures. The agreement is as follows:—

"On condition that 'tag' days and all other miscellaneous schemes for collecting in behalf of the above fund are abolished, I hereby agree to subscribe the sum of not less than One Dollar ($1.00) per month to the Amalgamated Canadian Patriotic Fund for so long as I shall remain in the employ of the ... ... Lumber Company, Limited, but in any case for not longer than the duration of the war; and I further hereby agree and authorize the ... ... Lumber Company, Limited, to deduct the sum of One Dollar ($1.00) per month from my wages and forward same to the secretary-treasurer of the above fund in Fernie, B. C., for administration."

Committees were appointed for the purpose of canvasing employees at the mills and camps.

A Plea for Preservation of Canadian Forests

Speaking at the meeting of the Montreal Forum, Dorchester Street West, Montreal, on December 5, Dr. Adams, of McGill University, and a member of the Conservation Commission, referred to the rapid rate at which Canadian forests are being depleted. The forests in the northern belt, he said, were not of such value as those in the southern belt, but in the latter the really good timber was seriously depleted. One-half of the total timber in the Dominion was located in British Columbia. There had been enormous destruction of forests in the past, the lumbermen having cut out the trees in such a way that the latter contributed to the spread of fire, and more timber had been burned down than had been cut by the lumbermen. In some instances the fires had so seriously affected the soil that replenishing was out of the question. Dr. Adams referred to the methods of the St. Maurice Forest Protective Association, and of the Lower Ottawa Association, to guard against fire, and said their efforts were examples of what could be done to resist fires.

It was supposed by some that the northern forests were inexhaustible; surveys, however, showed that this was a mistake, and it was possible that our forest wealth could be exhausted. How could we conserve our forests? We could protect them from destruction by fire, and he was glad to note that in British Columbia efforts were being made to this end. We must also replant our forests, and follow the example of European countries, where reafforestation had proved successful. He suggested in particular a scheme for conserving the forest resources in the northern belt, so that the country would have a permanent source of supply which would bring in a large annual revenue. The reason why such a scheme was not carried out was to be found in the changing character of governments, who preferred to pass it on from time to time rather than incur the great expense. A strong public opinion was needed in order to force a government to take up this question; it was only in this way that any government could be compelled to make the necessary expenditure.

Thirty-five per cent. of the graduates and under-graduates of the Faculty of Forestry at the University of Toronto have enlisted. About 62 graduates of the Faculty are engaged in forestry or allied professions and out of these, 20 enlisted by October 20th. Out of 71 under-graduates, 27 have enlisted.

Hugh C. McDonald, a retired lumberman, a native of Glengary, Ont., died recently at the home of his daughter in Bay City, Mich., at the age of 84.

Logging Operations During 1915-16

Reports from Manufacturers Indicate Similar Output to Last Winter—Eastern Product Likely to be Less

Enquiries made by the Canada Lumberman in regard to the probable output of logs during the present winter indicate that the quantity will be rather similar to that of last winter, with a possible increase in Ontario and part of Quebec and a decrease in the Maritime provinces. It is of course too early to secure definite statistics upon this subject, but a very fair idea of the situation can be obtained by reading the following reports:—

* * *

Playfair and White, Midland, Ont., report that they will not be taking any logs out of the woods this winter. They took no logs out last winter either. They expect, however, to be interested in some logs that are being taken out by other parties. In regard to trade conditions they report that it looks to them as though the output during the coming season will be rather less than it has been during the past two years. The market situation has not been good during the past year, but they find at the present time a better feeling and expect a very active market, even if prices do not go higher during the next few months.

* * *

The C. Beck Mfg. Company, Penetanguishene, Ont., will take out of the woods this winter about the same quantity of logs as they took out last winter. They report regarding trade conditions as follows:—"We have had good business recently and practically all dry stock has been picked up. Business has been spasmodic, however, but we think it will be steadier from now on. We have good hopes, from indications of orders, that yards are not afraid to stock up a little now.

* * *

Geo. Gordon & Company, Cache Bay, Ont., will take out 10,000,000 feet of logs this winter. Last winter they took out 16,000,000 feet. The company are now building a new mill to take the place of the one which was destroyed by fire. Of their last season's logs they still have left about 10,000,000 feet in the pond. The company report that market conditions have been much better during the past few weeks and that the outlook for the next three or four months is very promising.

* * *

The John Carew Lumber Company Ltd., Lindsay, Ont., will take out about 8,000,000 feet of logs this winter, as compared with 6,000,000 feet last winter. Regarding trade conditions the company reports as follows:—"The trade in lumber is much brighter than it was a year ago. We expect to take out about 100,000 railway ties, hemlock and cedar. We are operating two camps and will purchase from jobbers over an area of 200 miles of waterway."

* * *

A prominent firm of Northern Ontario manufacturers report that trade conditions at present are fair for most lines of lumber. Enquiries are more active and prices are equally as good if not stronger than at the close of 1914. The pulpwood market they find is dull. This firm will be taking out 6,000,000 feet of logs this winter and 18,000 cords of pulpwood. Last winter they took out 8,000,000 feet of logs and 10,000 cords of pulpwood.

* * *

The Clyde Forks Lumber Company, Caldwells Mills, Ont., will take out 300,000 feet of logs this winter. Last winter they took out none. "The present trade conditions," they say, "are brightening up and if this continues we may do better than we expect just at present. We expect a boom in this vicinity in the spring and if it materializes we intend to make some improvements to our plant."

* * *

The M. Brennen & Sons Mfg. Company Ltd., Hamilton, Ont., report that they will only take out about a half a year's cut this winter. They expect that lumber prices will advance, but they think that smaller cuts will be the rule this winter, as market conditions were not promising at the time of starting bush operations.

* * *

W. C. Edwards & Company Ltd., Ottawa, will take out about 6,000,000 feet of logs this winter, which is about the same quantity as they took out last winter. They report that business conditions have shown improvement during the last two months.

* * *

The Hope Lumber Company, Thessalon, Ont., report that they will take out about 16,000,000 feet of logs this winter. Last winter they took out about 12,000,000 feet.

* * *

The Thessalon Lumber Company, Nesterville, Ont., will take out 16,000,000 feet of logs this winter. Last winter they took out 8,000,000 feet.

The Fassett Lumber Company Ltd., Fassett, P. Q., will cut about 14,000,000 feet of logs during the present winter. They have about 6,000,000 feet left over from last winter's cutting, so that they will have about 20,000,000 feet in all. Forty per cent. of these logs are hardwood. Last winter they cut 12,000,000 feet and had 8,000,000 feet left over from the previous year. In a report upon market conditions they say:—"We find the lumber trade much improved during the last few months and we are looking for further improvements by next spring. We have been able to run our mill continuously the year round—although last winter we were obliged to run single tower—whereas it is customary for us to run night and day during the winter months. Owing to the quantity of stock we are carrying in our yards we expect that we will be obliged to run single tower this winter. However, operating our logging end as we do—by rail—we are in a position to increase our cut almost at any season of the year, and if conditions warrant it, we would start up night and day in January. We find that business has improved very much across the border, which in turn affects our market here. We are looking for fair business this winter and an increased demand in the spring, with a tendency for higher prices for hemlock, spruce and hardwoods."

* * *

The River Ouelle Pulp and Lumber Company, St. Pacome, P. Q., will take out 18,000,000 feet of logs this winter. Last winter they took out 19,000,000 feet. The company report that their output of 1915 stock has been contracted for, and about 40 per cent. of it has been shipped. They are now shipping quite freely to the United States market. Navigation being now closed from Quebec and Montreal, they are not sending any more lumber to the United Kingdom. They look for a fair market in the United States during 1916, but do not feel that they can say much about the export trade to the United Kingdom, owing to the scarcity of tonnage and the high freight rates. So far as the province of Quebec is concerned they believe that the same quantity of logs will be cut during the winter of 1915-16 as during that of 1914-15.

* * *

The Brown Corporation, formerly the Quebec and St. Maurice Industrial Company, with mills at La Tuque, P. Q., and head office at Portland, Me., report that they expect to take out the usual amount of logs this winter. They find that trade conditions are reasonably good and that the outlook for the next few months is favorable.

* * *

The Tourville Lumber Mills Company, Louiseville, P. Q., report that they will take out about 20,000,000 feet of logs this winter, which is the same quantity as they took out last winter.

* * *

The York & Sunbury Milling Company, Gibson, N. B., expect to cut about 7,000,000 feet of logs this winter which is about the same quantity as they had for their mill at the beginning of 1915. Reporting upon trade conditions they say:—"Many manufacturers of lumber in the Maritime provinces made early contracts for the season's cut in 1915, thereby throwing the chances of fluctuation in transportation charges on to the buyer. The present outlook is less favorable to the manufacturer because of the excessive transportation charges to the English market and the uncertainty of securing vessels, which will undoubtedly lower prices at shipping points. The outlook for the American market seems better than a year ago but increased demand has not developed to such an extent as would justify expectations of the market absorbing any large increase in Canadian shipments and maintaining prices at a satisfactory figure. The whole outlook is somewhat problematical and demands careful study and watchfulness as conditions develop."

* * *

The Bathurst Lumber Company Ltd., report that they will take out 60,000,000 feet of logs at Bathurst, N. B., and Bonaventure, P. Q., this winter. Last winter they took out 80,000,000 feet at the two places. "Trade is improving rapidly now," they say, "and we anticipate an active year for 1916." The Bathurst Lumber Company operate two sawmills and a pulp mill at Bathurst, N. B., also a shingle mill and planing and resawing mill. At Bonaventure, P. Q., they operate a sawmill and shingle mill.

* * *

Keenan Bros., Limited, Owen Sound, Ont., will take out the same quantity of logs this winter as last winter, namely 4,000,000 feet.

* * *

Mitchell Bros., Berkeley, Ont., will take out 1,000,000 feet of logs this winter. Last winter they took out none.

* * *

The lumber cut on the Point Wolfe and Salmon Rivers, N. B., this winter will be about two-thirds of normal. There will not be any operations at West River.

Sawmill of the Rathbun Company, Deseronto, Ont.

Box Factory of the Rathbun Company, Deseronto, Ont.

An Important Deseronto Industry

The Rathbun Company's Extensive Sawmill and Wood Products Plant—Waste Practically Eliminated

One of the oldest established lumber manufacturing industries in Canada is that of the Rathbun Company at Deseronto, Ont., which has long been known as an example of exceptional efficiency in the conversion of raw materials from the forest into finished products. The company has made a long and detailed study of the problem of avoiding waste in lumber manufacturing, and has been one of the most successful industries in this connection existing in Canada.

The company had its beginning in 1848, when the late Mr. H. B. Rathbun erected a mill on the Bay of Quinte at a place which has since grown into the town of Deseronto. Mr. Rathbun secured large timber limits, extending over thousands of acres, to feed the mill with raw material. From this early beginning the company has continually grown and prospered, until to-day its great variety of product is favorably known in many markets. With the object of avoiding waste many new industries have been inaugurated, and the result now is that the company work up practically all the residue from their lumber mills.

One of the most important plants operated by the company is its box factory. This is a large plant equipped with everything modern for labor saving and efficient production. Among our illustrations we show pictures of the interior and the exterior of the box factory. In this plant the company give employment to from 150 to 200 men and boys throughout the year. The machines are placed in such a manner as to provide a regular progression of raw material from the time the lumber enters the shop until it has been successfully passed through the various machines and has reached the store room at the far end of the plant in the shape of finished boxes.

The country surrounding Deseronto contains a large number of canning factories and the Rathbun Company have always been successful in securing a good share of their box business. They are thus favored with splendid opportunities for producing boxes at a low cost and marketing them to the best advantage.

Recently the Rathbun Company have been manufacturing a large number of shell boxes for conveyance of Canadian-made ammunition to the front. Their equipment for this work is complete and up-to-date and they have a large assortment of both hardwood and spruce lumber on hand, enabling them to turn out the boxes to good advantage and to deliver them promptly.

Deseronto is furnished with excellent transportation facilities. The Rathbun Company are able to make shipment by three railways, C. P. R., G. T. R., and C. N. R., and have also direct connection by vessel with the principal Canadian and American markets.

University Courses in Lumbering and Wood Utilization

The New York State College of Forestry at Syracuse University, Syracuse, N. Y., are arranging to give special attention to the subjects of lumbering and wood utilization. They are also considering the creation of a correspondence course in lumbering and the uses of wood. Trips are also being planned for students specializing in these subjects, and other lines of study are being undertaken having a direct bearing upon the lumber trade and dealing with current market conditions, etc. The Department of Lumbering and Wood Utilization in this college is about to announce a special course offered in lumber and forest products and quite a number of men have already indicated their intention of specializing along these lines.

Cruising Business Improving

Mr. James W. Sewall, the timber cruiser and surveyor, of Old Town, Maine, reports the most active winter along his lines that he has ever seen. Mr. Sewall now has several cruising parties out, and work ahead for several months for nearly his full force. He reports far more interest and willingness to spend money now than several months ago.

Interior of Box Factory—The Rathbun Company, Deseronto, Ont.

Shell Boxes Ready for Shipment—The Rathbun Company, Deseronto, Ont.

The Wilson Box Company's New Mill at Bonny River, N.B.

The accompanying illustration shows the sawmill plant at Bonny River, N. B., owned by the Wilson Box Company Ltd., of St. John, N. B. In previous issues we have been able to publish illustrated descriptions of the plants operated by this company at Fairville, N. B., and Westfield, N. B. The plant at Bonny River is a comparatively new one having been completed about a year ago. It is located on the Maguagadavic River in Charlotte County, on the shore line subdivision of the C. P. R. It gives employment to fifteen men who are engaged in sawing lumber for box purposes. From this point the company also carry on extensive logging operations, as they own important timber limits in that district. The output is chiefly box boards which are sent to their box plant at Fairville, N. B.

The Wilson Box Company Ltd., also own a sawmill plant at Westfield, N. B., on the St. John River, ten miles distant from the C. P. R., where they employ thirty men. This plant is also employed almost exclusively in the production of box boards for the company's box factory.

The box plant, located at Fairville, N. B., a suburb of St. John, is one of the largest east of Montreal. It occupies, including the lumber yards, eight acres of land and gives employment to 65 men. The company have an extensive nailed up box trade in St. John and they also ship box shooks to all parts of the Maritime provinces and to other markets by steamer and rail.

The managing director of the Wilson Box Company Ltd., is Mr. Alexander Wilson, a Scotchman, born in Buckie, Banffshire. The company has conducted a successful business from the start and has recently found it necessary to increase its capital stock from

Wilson Box Company's New Sawmill at Bonny River, N.B.

$50,000 to $75,000. The president of the company is Mr. T. H. Estabrooks, and the vice president is Mr. Stanley E. Elkin.

Mr. T. H. Estabrooks is widely known throughout Canada as one of the largest and most successful tea importers in the country and his firm is a very valuable customer of the box company. Mr. Stanley E. Elkin is the head of the Maritime Nail Company, whose products are sold all over Eastern Canada and to a considerable extent in Western Canada.

B C. Government's Market Widening Campaign

The largest market for British Columbia lumber will always be the neighboring prairie provinces, the quantity consumed by Alberta, Saskatchewan, and Manitoba amounting to 60 per cent. of the total production. The actual amount, which in 1912 was seven or eight hundred million feet, fell in 1914 and 1915 to about half that quantity. This loss, combined with the heavy fall in lumber prices and the falling off in the amount of timber used in B. C. itself, brought about depression in the lumbering industry of B. C. With town and city building operations on the prairies at a standstill for the time being, with the construction of new railroads more or less completed, the difficult problem of how to increase the consumption of lumber in the prairies has been pressing for solution.

An investigation of the subject of lumber consumption on the prairies which the Minister of Lands of B. C. directed to be made, disclosed the fact that buildings on the average farm have not kept pace with crop production. There exists a great need, which will continue for many years, for all manner of farm buildings, particularly for implement sheds, gnararies and barns for live-stock. Nearly every farm is without some building essential to really profitable farming. The prairie agricultural authorities, of course, have been fully alive to this situation, and in all three provinces have been considering the issuance of pamphlets dealing with the need and advantages of more up-to-date buildings on the farms. They are encouraging farmers in every possible way to go in for mixed farming, which, of course, cannot be successfully carried on without well designed buildings.

Inasmuch as the principal material for all these buildings is wood, the results of the investigation made it evident that here lay an opportunity to assist the farmer which would at the same time inevitably lead to an increased use of lumber. An offer to co-operate with the University of Saskatchewan in the preparation and publication of a complete series of bulletins on farm buildings was cordially accepted by the Minister of Lands, and for the last six months or more officials of the Forest Branch and the College of Agriculture of the University have been engaged in this work. Some of the bulletins are now being delivered, and the final one will be finished shortly. The series comprises ten bulletins in all, and covers the following subjects:—

1. Combination or General Purpose Barns for Prairie Farms .
2. Dairy Barns, Milk and Ice Houses for Prairie Farms.
3. Beef Cattle Barns for Prairie Farms.
5. Sheep Barns for Prairie Farms.
6. Piggeries and Smokehouse for Prairie Farms.
7. Poultry Houses for Prairie Farms.
8. Implement Sheds and Granaries for Prairie Farms.
9. Silos and Root Cellars for Prairie Farms.
10. Farm Houses for Prairie Farms.

The pamphlets are of handy size, well arranged, and contain illustrations of the various plans. Besides information dealing with the use of buildings, and method of erecting them, complete bills of material are given. The bulletins will thus assist the farmer to decide upon the designs for a building and render it easy for him to estimate cost and to order materials.

An introduction to each bulletin explains the objects aimed at, and describes in a general way the lumber industry and forest policy of the province. A chapter at the end treats of the merits of wood as a building material, the qualities of the various kinds of British Columbia woods, and the uses for which they are best adapted. The covers are utilized to describe briefly the timber resources of the province. Through farm journals and local prairie newspapers the farmers' attention will be drawn to these publications and systematic distribution will be made by the Department and the prairie lumber commissioner at Regina.

Altogether these bulletins mark a new departure in governmental activities in connection with the lumber industry and one which will be watched with interest, particularly since the increase of industrial production in British Columbia depends so seriously upon the utilization of its immense forest resources and the succesful development of the lumbering industry.

Quebec Culler's Report

Quebec, Dec. 3, 1915.

The following comparative statement of Timber, measured and culled at Quebec to date, is furnished by the Quebec Supervisor of Cullers' Office, under date of December 3rd:—

	Cubic Feet 1913	Cubic Feet 1914	Cubic Feet 1915
Waney White Pine	244,280	593,080	401,680
White Pine	7,560		
Red Pine	960	1,040	
Oak	166,200	343,240	119,440
Elm	284,880	305,240	46,840
Ash	6,000	680	840
Birch and Maple	47,680	50,800	48,880

California Redwood Described in Beautifully Illustrated Booklet

One of the most attractive advertising publications that we have yet been favored with is a booklet devoted to "California Redwood" published by the Pacific Lumber Company and written and designed by the H. K. McCann Company, San Francisco. The manufacturers of redwood have recently been devoting a great deal of attention to the advertising of their splendid products and the result has been exceedingly encouraging. The publication of an illustrated booklet is only one of their many methods of advertising. From an artistic point of view this booklet is a masterpiece. It is bound in very handsome board, the front of which is embossed in a charming design. The illustrations throughout the book are very striking and the information which it contains is extensive and persuasive. One cannot fail from this booklet to secure very definite and practical information regarding redwood, its production, and its special interest to the individual reader. We understand that the Pacific Lumber Company are about to commence a wide-spread publicity campaign of which this interesting booklet is the forerunner.

Huntting-Merritt Company's New Shingle Plant

The Huntting-Merritt Lumber Company, Limited, erected recently, one of the most modern shingle mills in British Columbia, on the North Arm of the Fraser Fiver, about a mile west of the town of Eburne. The accompanying illustration shows the layout of the plant.

The mill buildings occupy a site 500 x 400 ft., the latter figure representing the waterfrontage. The contract was let to the Heaps Engineering Company, Limited, New Westminster, for a lump sum to cover speedy erection and equipment. Work was commenced July 23rd of last year, and 90 days later the plant was turned over to Mill Designer D. B. Campbell, of Vancouver, for the finishing touches and final adjustment of the machinery. The shingle mill is 106 x 36 ft., two storeys, built parallel with the waterfront. The upper floor contains eight Schaake machines in line, and a roomy filing room in the north-east corner; at the south-west end space is reserved for three or four additional machines which will be installed when the trade calls for an increased output. The packing of the shingles is done on the ground floor, where the engine room is also located. At the easterly end of the mill an "L" projection 24 x 60 ft. in size forms the wood preparing room; it contains the steam log-haul, steam log stop, 84-inch swing cut-off saw, power splitter, knee bolter and automatic grinder for cut-off saw. As the sections are sawn from the log they fall upon chains and pass along to the overhead steam splitter where with rapid strokes of the powerful chisel they are halved and quartered and any sapwood cut away. The blocks are then carried forward to a cross conveyor passing in front of the shingle machines, from which they are fed to the block tables of the operators by the employee in charge of this work. The surplus blocks pass on to the westerly end of the conveyor and drop down a chute to the water for future use. One of the economies arranged for was that, with the plant operating under a 20-hour schedule, the crew in the wood preparing room could be dispensed with on the night shift, thereby saving the wages of three men. The machines are then fed from the surplus supply of blocks cut during the day and stored in the pond below, delivery being made by a block conveyor at the easterly end of the machine room which connects with the main feed chains.

In the shingle packing room on the ground floor the bundles are loaded on cars for the trip down an inclined platform to the dry kilns, three in number, located 150 ft. to the north. The shingles remain on the cars until properly dried and then pass on to the storage shed for loading into B. C. E. R. cars as orders require.

The engine room on the ground floor is 24 x 26 ft. and contains a Lane & Bodley Co. twin engine, 13 x 17 in., 160 h.p. capacity, fitted with coil feed water heater. The boiler house, about thirty feet away, is 26 x 40 ft. It contains one Vulcan Iron Works return tubular boiler, 72 x 18 in., and one Vancouver Machinery Depot boiler 66 x 16 in., the latter being used for supplying steam to the dry kilns. Both boilers have Dutch oven fittings for automatic stoking.

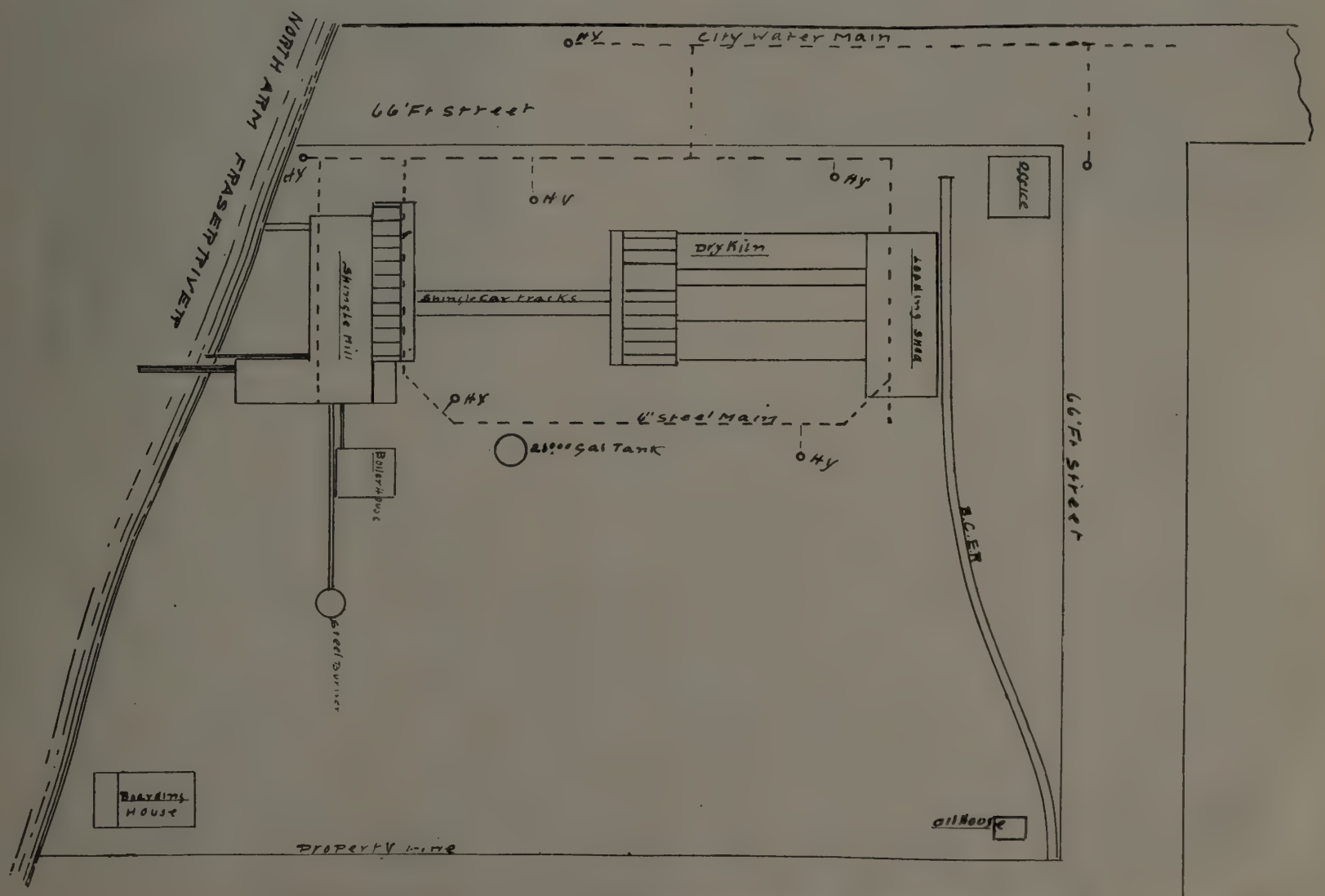
A brick-lined steel burner, which is located east of the boiler house, consumes the mill refuse. It stands 100 ft. away from the mill on a concrete foundation, is 16 ft. diameter, 40 ft. in height, and is a fine example of Vulcan Iron Works efficiency in this line.

Particular attention was given the question of fire protection. A complete system of waterworks was put in by the Walsh Construction Co., and connection made with the Point Grey supply system. The main pipe, of 6-in. diameter, feeds seven hydrants using 2-in. hose located inside the buildings, and five two-way hydrants using 2½-in. hose at outside points of the mill site. In addition, the various buildings are further safeguarded by a sprinkler system installed by the Automatic Sprinkler Co. of America, the work being done under the personal supervision of the Pacific Coast manager, Philip Gearhart, of Seattle. The gravity water supply is taken from a 25,000 gallon tank erected by the Vancouver Wood Pipe & Tank Co., Ltd., which stands on a tower 75 ft. in height.

The unique feature of the plant, apart from the arrangement of the buildings for manufacturing purposes, are comprised in the steam log stop, steam splitter and system of block storage for night use.

The belting used throughout was furnished by the Consolidated Rubber Co., Ltd., and Taylor Belting Co., Ltd., Vancouver.

Mr. Huntting reports a brisk demand for the output of the plant. At the beginning of the season the orders could be filled by operating the eight machines on a ten-hour schedule, but a little later, when the American dealers had tested out the quality of shipments sent forward, repeat orders were placed for large quantities, and since then the mill has been cutting night and day.



Plan showing layout of new plant of the Huntting-Merritt Lumber Company at Eburne, B.C.

Guarding the Lower Ottawa

The organizing of limit holders into mutual fire protective associations has had about four years of rigid testing in Canada. The good results have been so convincing that new associations in all the forest provinces must sooner or later come into existence. With a few exceptions the members of the St. Maurice and the Lower Ottawa associations in Quebec, each embracing about 12,000 square miles, are committed permanently to the idea of forest protection by co-operative effort as against any other system. The objects of efficiency and economy are attained in a degree quite impossible where politics or other fettering influences are present.

Recently the Secretary of the Canadian Forestry Association, in company with Mr. Arthur H. Graham, Manager of the Lower Ottawa Forest Protective Association, was privileged to pay a visit to Devil's Mountain which overlooks a radius of thirty to forty miles of the Gatineau and Lievre watersheds. Devil's Mountain forms a pivotal point of the Association's operations in that area. Upon its summit, the highest for at least a hundred miles around, was mounted last spring a lookout tower, giving the ranger an additional altitude of about fifty feet. The work was done entirely by Mr. Graham and his assistants from materials within the immediate district and forms a substantial, wind-proof vantage-point of incalculable service to the Association. To look across the endless miles of valley and watercourses, heavily blanketed with evergreen and hardwood forest, broken here and there with a patch of silvery lake or the misty steeples of a settlement, conveys a good idea of the ease and accuracy of discovering and locating a near or distant fire. Only a few weeks before, the ranger in charge noticed the beginning of a small blaze over thirty miles away and from his knowledge of the country was able

The cabin of the lookout man, on the Devil's Mountain, showing Manager Graham and three of his staff.

to telephone to rangers in the neighborhood of the trouble and direct them where their services were needed. Prompt obedience isolated the damage to a fraction of an acre.

Half a mile through mountain trail brings one to the opposite side of the plateau where a second tower of more modest proportions surveys an additional segment of valley and hillside. Several times a day, from early spring to late fall, the ranger makes his round from station to station scrutinizing the surrounding country for signs of mischief. Anything suspicious is immediately reported to the nearest ranger or inspector by telephone, the instrument being located in the ranger's cabin a short distance down the mountain trail. The theory of this arrangement is undoubtedly good, but the practice is even better. Anyone acquainted with forest travel will recognize that the range of vision of a man climbing a trail or walking along a settler's road is limited to a few rods or at best a few miles. By the combined elevation of the mountain top and the lookout tower one man may survey accurately more territory than possibly two hundred men down on the forest level. The telephone line at the cabin is connected some miles away with private wires belonging to lumber and pulp companies and leads ultimately into Buckingham and the manager's office in the City of Ottawa. The Association is developing its telephone facilities as speedily as possible and will soon have the aid of a new line forty miles in length from River Desert to Tomasine Depot, built by W. C. Edwards and Co., Limited, which will eventually be carried to Lapine Depot in the Gatineau limits of the company.

The staff of the Association consists of Mr. Graham as manager, four inspectors, and fifty-eight rangers. While the extent of territory, 13,000 square miles, might make this staff seem inadequate during a dangerous season, their efficiency is very greatly increased by their power of summoning any foreman employed by a limit-holding member to turn over his staff of men at a moment's notice for fire fighting purposes. The company so called upon charges the time of the men against the Association. The advantage of this scheme is obvious, for with logging camps within reach of fires, the ranger can often commandeer plenty of good help, tools, and commissariat supplies, which are points of the highest importance

What of the practical money-saving results? As with the elder-brother of the St. Maurice, the limit holders in the first twelve months of organized operations have received higher dividends from saved timber than were ever paid to them by their sales of manufactured lumber. Occasionally one encounters a limit-holder who contends that he never heard of so many fires until the scientific fire ranging systems came into existence. The reason for his remark is hardly mystifying. In the 'good old days' fires were not usually seen nor their extent estimated unless they cleaned out the logging camp itself. A lumberjack usually guessed at a burn as some farmers guess at a morning's tramp—'a-mile-and-a-bit'—and let it go at that. Secondly, the fire risk in the 'good old days' was minimized by the isolation of the forests from settlement. To-day, scarcely a limit in any province but is cut into and rimmed about by settlers, the most prolific of all fire causes. Railways have also spread into the forest districts bringing with them a measure of danger. It is undeniable that the information regarding burned-over areas secured by rangers of the two Quebec associations amazed the limit holders, some of

Lookout tower on Devil's Mountain, which gives the ranger a commanding view of over thirty miles.

whom almost refused to believe that losses in the past had been so considerable. It is equally undeniable that with the organization of the limit holders for forest guarding purposes, the annual losses have been cut to a fraction. The total cost of guarding the territory of the Lower Ottawa last year amounted to .2995 of a cent per acre while one-dollar per acre per annum is a very modest estimate of the appreciation of average woodlands.

Beyond any other lesson which the success of the Lower Ottawa and the St. Maurice schemes contains is the identity of skilled (and non-political) management and efficient results. The inspectors and manager have absolute authority to 'hire and fire.' Rangers are held under strict discipline at all times and during the past two seasons a number of dismissals have taken place. The system of inspection is unrelenting; a ranger may be called upon at any time to explain his movements within a given period and if unable to do so satisfactorily his place is taken by a more promising person. No 'pensioners' of the lumber companies, no over-aged or decrepit hangers-on of the local member of parliament or legislature, are given any consideration in appointments. Young and vigorous men are invariably selected and kept at tension by frequent inspection. Surely the reason for the smartness and reliability of the associations' rangers supplies equally the reason why so many of the political systems of the provincial governments succeed in wasting scores of thousands of public money and getting second-rate results.

Reproduced from the Canadian Forestry Journal.

Importance of a Proper Credit System

By I. B. Hanks

The business of a retail yard quite naturally divides itself into two fundamental parts, the sales end and the credit end.

It is an open question as to which of the two departments is the more important. Arguments could be advanced in favor of each by their respective advocates.

Success in the handling of a yard cannot be attained without the proper handling of each.

If one is a shade more important than the other, it is the credit end. A man can manage to stay in business for a considerable time even though he be a poor salesman, but if he be a poor credit man, to survive for any length of time nowadays is almost an impossibility.

In no department of their business have the retail lumbermen made such strides toward improvement during the past five years as they have in the matter of credits. This is true not only of lumbermen in the United States, but pertains as well to those doing business in Canada. The movement in the direction of better credit methods is a general one.

To the casual observer this might indicate nothing but the desire of the retailer to handle his business along improved lines. To the initiated, or to those who have made it a practice to keep in touch with commercial and financial conditions obtaining during the period referred to, it is plainly evident that this improvement has not been wrought merely through his desire to be known as a better business man, but through sheer necessity. And the fact that a class of men, identified with a line of endeavor in which credit methods were so notoriously bad, has been able to so readily and rapidly adapt itself to the new order of things speaks well indeed for the retailers.

Conditions Have Changed

Conditions surrounding all lines of business fifteen years ago were vastly different from conditions as they have existed for the past few years. In those days our country, particularly the northwestern part of it, was new, comparatively speaking. The field open to any line of business was large. There existed wide reaches of virgin territory awaiting development.

Competitive conditions were such as to allow one operating a business to secure without great difficulty a "volume" of business or "turn over" (whichever you wish to call it) adequate to his needs. This could be secured at prices which admitted of a large profit.

To put it plainly: It was so easy to make money in any line of business in which one engaged that it did not occur to the average individual that the time would ever come when it would be necessary for him to alter his methods greatly or suffer defeat.

In those days the country was developing by leaps and bounds. Plenty of money for everyone at good prices. Plenty of money to be had of the banks on most favorable terms. Due to the ease with which a business could be financed, each man vied with his neighbor and his competitor to build up the largest business possible in the shortest possible time. To give the impression of immensity appeared to be the chief aim of everyone engaged in business.

People appeared to lose sight entirely of the interest charge against their business and of the number of poor and worthless accounts accumulating. As stated before, it was comparatively easy to obtain money and consequently credit was extended right and left, with very little thought of whether or not the debtor was deserving of it. Business men pointed with pride to their heavy outstanding accounts and bills receivable, apparently feeling that the presence of these in sufficient quantity marked them as successful business men.

They failed to follow up cases of non-payment closely and to insist upon interest-bearing notes and security.

What has been stated above applied to the retail lumbermen as well as others.

Cannot Afford to Take Chances

Beginning, however, a few years since, it has been borne in upon them very strongly that they could not continue their slipshod credit methods and survive. A decreased volume of business and a much narrower margin of profit brought about by changing competitive conditions, combined with a disinclination on the part of those having money to let it out as freely and easily as before, have made it plainly apparent to the retailer that he cannot afford to take the chances he did in former years. And he is rapidly setting about to put himself right.

Elaborate credit departments may be organized; complete filing systems for credit information devised; methods pursued which entail much correspondence between general office and yard manager. But it is upon you who are on the firing line that the burden falls. It is you with whom the responsibility lies. No general office system or staff, no matter how complete or competent, can guard entirely against faulty judgment on your part. And only experience gained through a study of human nature and the ability and willingness of the average run of people who purchase lumber and building material to meet their obligations can develop, in your case, a man who is fully competent to assume the management of a retail yard of to-day.

It is not sufficient, however, that you pursue the course of study mentioned. Unless you go at it methodically and systematically you cannot hope to develop within yourself the qualities necessary to success as it pertains to this department of your business. Unless you work along well defined lines and unless you plan to incorporate much of the information gained from time to time into records of a permanent nature, you will eventually find that much of your effort has been wasted.

Have a Definite Credit Plan

To start out, then, map out a definite credit plan for yourself and then stick to it. This may be independent of the system devised by your general office if you are a line yard manager and still not conflict with it in any manner. It is better, however, to fashion it in such a manner as to incorporate into it the ideas of your general office credit department and at the same time ideas of your own which will supplement those of the general office. Thus you will render it still more difficult to make errors in the extension of credit.

If handled properly, your collections are half made at the time of the sale. It is an undisputed fact that nine-tenths of all the difficulties experienced by line yard companies in the making of their collections can be traced directly to failure on the part of their representatives to have a perfect understanding, in writing, with the customer at the time of sale as to just how and when the account is to be paid.

It is assumed that you are fully acquainted with conditions as they exist at your point; that you know about how much of any one crop can be produced to the acre under normal conditions; that you know to what extent your territory can be depended on to produce a crop year after year. You know approximately what it costs to farm an acre of land under varying conditions and so you are in a position to figure out what yield a farmer in your community must have before he can meet expenses.

Possessing this knowledge, you are now in a position to set about in a systematic manner to collect your credit information.

I have found an alphabetical card index very convenient. One having cards about four by six inches will answer the purpose. Special rulings can of course be had, but if you do not care to go to the expense of having such a ruling made, and can find nothing more suitable, one having merely horizontal lines can be used. This record is so compact as to allow of its being being locked in your desk out of reach.

One card should be used for each farmer residing in your territory. On it you place his name, postoffice address and the description of all land he owns or works, together with the amount of any incumbrances you may know to exist.

Under the proper year dating you place the number of acres you figure he has under cultivation. Also statement as to whether or not he practices mixed farming or interests himself only in grain raising.

If you are in a position to know what instruments such as real estate and chattel mortgages, mechanics liens, judgments, etc., are registered against those in your territory, from time to time make a note of these on the card as fast as they come to your attention.

Somewhere on the card place a symbol which will show to one understanding it whether a man is good, fair or poor pay.

The working up of this record will take considerable time and will make necessary a great deal of work before it is complete. It can, however, be done at odd times, and when once complete will constitute a record which will prove invaluable to yourself or your successor.

When once complete the record should be kept up to date. Both sides of the card can be used and if necessary a second card can be placed next the first.

The keeping of this record up to date shows you at a glance whether your man is making headway or losing ground in his business.

It is not sufficient that you keep the record only on those you are selling. Keep it on everyone living in your territory. You are then provided with information regarding them in advance of their making application to you for credit. You are thus prepared for them and in a position to give them a definite and decided answer without hesitation.

Learn from the Bankers

In handling the credit end of your business, you can well afford to take a few lessons from your local bankers. Observe the care which they take in securing information as to a man's affairs, down to the smallest detail, before making him a loan.

You may argue that the banker has more right to the information than you have. Not so, however. Your stock of lumber and building material represents money. From a business standpoint, it is every bit as valuable. If you are asked by a prospective customer

WANTED & FOR SALE DEPARTMENT

PUBLISHER'S NOTICE

Advertisements other than "Employment Wanted" or "Employees Wanted" will be inserted in this department at the rate of 15 cents per agate line (14 agate lines make one inch.) ($2.10 per inch) each insertion, payable in advance. Space measured from rule to rule. When four or more consecutive insertions of the same advertisement are ordered a discount of 25 per cent. will be allowed.

Advertisements of "Wanted Employment" will be inserted at the rate of one cent a word, net. Cash must accompany order. If Canada Lumberman box number is used, enclose ten cents extra for postage in forwarding replies. Minimum charge 25 cents.

Advertisements of "Wanted Employees" will be inserted at the rate of two cents a word net. Cash must accompany the order. Minimum charge 50 cents.

Advertisement must be received not later than the 10th and 26th of each month to insure insertion in the subsequent issue.

Wanted–Lumber

Wanter to buy Cedar Ties. Apply Box 269, Canada Lumberman, Toronto. 23-1-2

Wanted to buy 1-in. cull Basswood and 1½-in. good Basswood. Apply Box 270, Canada Lumberman, Toronto. 23-1-2

Wanted for shipment whenever in shipping condition:
2,000,000 ft. 3 in. No. 1 Com. & Bet. Soft Elm
1,000,000 ft. 2½ in. No. 1 Com. & Bet. Soft Elm
1,000,000 ft. 2 in. No. 1 Com. & Bet. Hard Maple
500,000 ft. 2½ in. No. 1 Com. & Bet. Hard Maple
Box 274, Canada Lumberman, Toronto, Ont. 24-3

Wanted

10 cars 2-in. Hard Maple or Birch Common and Better. Apply Box 258, Canada Lumberman, Toronto. 22-1

Wanted

Birch and Soft Elm 1 in. to 4 in. dry or new cut. State quantity and full particulars. The London Lumber Co. Ltd., London, Ont. 22-1

Wanted

Several cars 4/4 x 4 in. and wider, 4 ft. and 5 ft. D and Better White Pine Shorts, rough. Wolf-Lockwood Lumber Co., Grand Rapids, Michigan, U.S.A. 23-24

Wanted

500,000 ft., or any portion 4/4 dry White Pine, Box grade, for immediate shipment to Boston, Mass. Widths to run 5 inches up, and lengths, 8 to 16 ft. Box 268, Canada Lumberman, Toronto. 23-2

Wanted

100,000 Cedar Ties.
1½ in. and 3 in. Maple, Beech and Birch Lumber.
2 and 3 in. Soft Elm, 2 in. Rock Elm.
Dry or new cut. State quantity you can supply, and when.
Box 250, Canada Lumberman, Toronto, Ont. 21-24

Lumber Wanted

We are open to buy Logs, straight, clean and suitable for making Veneers as follows:
50 to 100 M ft. Birch, 16 in. and up. 7, 8, 14 and 16 ft.
20 M. ft. Hard Maple, 16 in. and up, 7, 8, 14 and 16 ft.
10 M. ft. Soft Maple, 16 in. and up, 7, 8, 14 and 16 ft.
20 M. ft. B. Ash, 14 in. and up, 7, 8, 14 and 16 ft.
20 M. ft. Basswood, 14 in. and up, 7, 8, 14 and 16 ft.
Write stating what you can offer, naming shipping point.
Dominion Mahogany & Veneer Co., Ltd.,
24-24 Montreal West, Que.

Wanted to Buy

15 million feet White Pine, Red Pine, Spruce, and Hemlock. Also Lath. Box 259, Canada Lumberman, Toronto. 22-1

For Sale–Lumber

FOR SALE—Considerable quantity of hemlock ties suitable for Electric Railways, Sidings, etc., ready for immediate shipment. Monteith Bros., Rosseau, Ont. 24-3

We Have a Full Stock

of Hardwood, Hemlock and White and Norway Pine Lumber, Norway and White Pine Piling, up to 60 ft. Keenan Bros., Limited, Owen Sound, Ont. 3t.f.

For Sale

45 acres standing cedar near railway. Apply S. A. Price, 71 Lakeview Ave., Toronto. 24-24

Lumber for Sale

100,000 ft. Spruce 5th quality and better, 3 x 3 8/14 ft. $15 per M. ft. 50,000 ft. Spruce and Hemlock Culls, 1 & 2 3 x 3 at $12.50.
One Million No. 1 & 2 1¼ in. cull Lath at $1.50 on cars Manseau Savoie & Co., Manseau, Que., on I. C. R. 22 1

Lumber For Sale

200 Pieces 1 x 15 and up 22 ft. Cypress.
375 Pieces 1 x 15 and up 24 ft. Cypress.
Clear for boat building, in stock at Montreal.
GEO. C. GOODFELLOW,
Montreal. Que

Lumber For Sale

We have for sale a quantity of dry 6/4 Hard Maple suitable for Shell Box Work. Also 4/4 Hard Maple 8¼ in. and up. Will quote low price for quick shipment. Address London Lumber Co., Ltd., London, Ont. 24-24

White Oak For Sale

Thirty thousand feet White Oak, cut, 1, 2, 3, 4 inches thickness, various lengths from 12 to 32 feet. Also odd sizes, including squares 4, 6, and 8 inch. A snap for quick sale.
CAMERON & CAMERON,
24-3 Beaverton, Ont.

Wanted–Employment

Advertisements under this heading one cent a word per insertion. Box No. 10 cents extra. Minimum charge 25 cents

Machinist wanted. First Class. Experienced in up-to-date saw mill practice. John B. Smith & Sons, Toronto. 24-24

Thoroughly experienced lumberman in all branches from stump to consumer wants position with wholesaler or manufacturer. Box 261 Canada Lumberman, Toronto. 22-23

Position as superintendent or foreman in box factory; 30 years experience; experience in making shell boxes. Box 266, Canada Lumberman, Toronto.

Lumber Inspector Pacific Coast

Wide experience, inspector export and domestic, Douglas fir, cedar, spruce, California redwood, etc. Would like to get in touch with Eastern buyers as representative or inspector Pacific Coast. A1 references. Address care Western Lumberman, Vancouver. 24-24

Wanted

Position as Lumber Inspector or Salesman. Fifteen years' experience in lumber yards, mills and office; thorough knowledge of White Pine Grades or British Columbia grading; also a general knowledge of export grades for United Kingdom. First class references given. Apply Box 273, Canada Lumberman, Toronto, Ont. 24-2

For Sale–Machinery

WOODWORKING MACHINERY FOR SALE:—1 10-in. Berlin four side Moulder; 1 New Britain chain mortiser; 1 Defiance rounder, borer and jointer; 3 pole rounders; 2 automatic knife grinders; 1 26-in. Whitney smoothing planer; 2 26-in. revolving bed double surface planers; 6 30-in. Ideal pedestal bandsaws; 1 20-in. American wood scraper; 2 two-spindle wood shapers; 2 power feed rip saw tables. H. W. Petrie Limited, Toronto. c

For Sale

68 Dry Kiln ..rucks. Gillette roller bearing, end piling.
John Fenderson & Co., Inc.,
24-24 Sayabec, Que.

For Sale

Two 54 in. x 12 ft. Stationary Boilers, in use only 8 months, complete with full arch fronts, smoke box and stack, and all regular fixtures and fittings, working pressure 100 lbs.
WILLIAMS & WILSON, LTD.,
24-24 Montreal, Que.

Machinery For Sale

One 150 h.p. Stationary Engine; two 75 h.p. Tubular Boilers; two Resawing Machines (with Circular Saws). Savoie & Co., Manseau, Que. 22-1

For Sale

Log Hauler, built by Alex. Dunbar & Sons; also several sets of sleighs. Address:
DENASTON BREAKEY,
Breakeyville,
21-24 Co. Levis, P. Q.

For Sale

Logging Equipment
R. R. Locomotive
Logging Sleighs
Snow Plows
Hoisting Engines
Chain, etc.
Box 257, Canada Lumberman, Toronto 22tf

Machinery For Sale

1 Boiler 72 in. x 14 ft.
1 Boiler 52 in. x 14 ft.
1 Boiler 48 in. x 14 ft.
1 Jack Ladder Chain 300 ft. long.
1 Horizontal Engine complete with driving pnlley. Box 271, Canada Lumberman, Toronto, Ont. 23-24

Saw Mill Machinery For Sale

Second-hand Machinery for Complete Saw Mill, all practically new, in excellent condition, including Bullwheel, Steam Kicker, Steam Nigger, 42-in. Steel Carriage, 10-in. Steam Feed, 8-ft. Waterous Bandmill, 5-saw Slab Slasher, 48-in. Edger, Trimmer, also Independent Lath-mill, and Filing Room outfit. Power Plant complete. Offers accepted for all or any part. On view at the Waterous Engine Works Company, Brantford, Ont. t.f.

Business Chances

Wanted

Practical Sawmill Man with four to five thousand dollars to invest in small mill cutting twenty-five thousand feet of Spruce lumber per day, located within one hundred miles of Edmonton, Alberta, on two Trunk Line Railways and fair sized lake. The very best of shipping facilities and a first class money making proposition. We have the mill and the timber and we want a good practical saw mill man to run it, who can invest some money. Address C. T. Nelson, P. O. Box, 1353, Edmonton, Alta. 23-24

Miscellaneous

Engine For Sale

Corliss Engine, 150 h.p., 18 cylinder, 24-inch leather belt, heater and pump, first-class condition, no fault, changing plant to electric. Inspect at Guelph Lumber Co., Guelph, Ont. 24-24

Automobile for Exchange

We have a "Light Six" Chandler, 1915 model, electric light, self starter, and all up-to-date equipment, in good condition. Cost new $2,350. Will sell in exchange for lumber, any kind of lumber, dead cull and better, and will make a big cut in the price of the car. J. & W. Duncan, Limited, 1801 Ontario East, Montreal. 24-24

30 Replies

are often received to "Wanted" and "For Sale" ads. on this page. Even 50 replies are not an uncommon return from the investment of the small amount a condensed ad. costs. And isn't that good business—to get right into close touch with so many people interested in what you have to buy or sell? For you can be sure their transactions with you will not end when they have closed the business your single ad. announced.

Belgians Buying House Material

The Belgian Government has sent John Schobben and H. Helaers to the United States to obtain material for 10,000 five-room houses, material for trench timbering, and later about 1,500,000 railroad ties and other items, which it is estimated will bring the total to more than 100,000,000 feet of lumber.

The two Belgians are now in the Southern yellow pine producing section, where they probably will remain for thirty to sixty days. This information was received from W. H. Sullivan, vice-president and general manager of the Great Southern Lumber Co., operating mills at Bogalusa, La., who said the trade envoys had visited the mills of his company early last week.

An Opportunity

Wanted—A young man who knows the practical side of the woodworking business and can express his ideas in writing, as Assistant Editor of trade journal; experience in construction work an advantage, but not essential. State full particulars and salary expected. Box 25, Canada Lumberman, Toronto.

to loan a portion of it, you immediately assume the role of a banker so far as he is concerned, and as such you are every bit as much entitled to information concerning his affairs as is the banker.

Your banker, before making a loan, insists upon a printed blank being filled out and signed by the applicant. This blank calls for a complete listing of all property, real and personal, owned by the party wishing the loan, together with all encumbrances against it. Also a statement of all other debts.

A great many of the line yard companies are at the present time making use of this blank and are meeting with very little difficulty in getting a prospective customer to sign it. If you are not already using this, you can improve matters greatly by doing so.

No matter how proficient you may be in sizing up the desirability of a customer's business, you will find that the existence of the information listed in black and white will present matters in such a manner as to make it possible for you to judge much more accurately than is possible if you are carrying the information in your head.

Exchange Credit Information

Make it a point to exchange credit information with other retailers in your town. Let this include your competitors as well. If they are not in favor of doing so, talk them into it. Explain to them the advantage to be gained by doing so. Point out to them the absolute foolhardiness of selling a man who already owes their competitor.

I have seen this system of exchanging credit information with competitors worked out successfully in the following way:

Each yard manager in a town furnished each of his competitors at the close of his month's business with a list showing all those owing at his yard. No amounts were given. The amount owing by any one customer could be had, however, by making personal application to the manager of the yard which the party owed. These lists were revised every thirty days. The system resulted in a noticeable decrease in losses in the business of each yard.

The information of a credit bureau among the retailers in all lines in a town has been found to work out very satisfactorily. In this plan a regular organization is perfected, having as its object the compiling of credit information which shall be of benefit to all its members. A secretary is elected at a moderate salary whose business it is to see that all members furnish his office each thirty days with a list of all those owing them.

Your collection is half made at the time of sale if handled properly. Have a perfect understanding with your customer at that time as to exactly when payments are to be made. Convince yourself before making the sale that your customer is not promising to do that which will prove impossible. And have it all in writing.

A poor account never improved by allowing it to rest. The minute you discover that an account is not all that you thought it to be, get busy and bring matters to a showdown. Either insist upon and get ample security or convince yourself that it is a dead loss and then charge it off.—I. B. Hanks in The Mississippi Valley Lumberman.

Good Opportunity for Canadian Boxes and Shooks in France

The secretary of the Toronto Board of Trade has received from Mr. Philippe Roy, general commissioner for Canada at Paris, France, an interesting letter regarding the excellent opportunity now existing for Canadian manufacturers to open up a market in connection with boxes and cases for packing and especially for box shooks.

In his letter which is written from Paris under date of November 23rd, Mr. Roy says:—"I have just received an enquiry from an established concern in Bordeaux (Gironde), Messrs. Archambeaud Freres, 9 Rue de Bel-Orme, whose cable address is Arielle-Bordeaux, regarding boxes and cases for packing and especially box shooks. It appears that the price of boxes has risen considerably since the war and it seems to me that it would be a good opportunity for Canadian manufacturers to open a market in this country provided freight rates are not prohibitive to the point of making all business impossible." Continuing, Mr. Roy asks the secretary of the Toronto Board of Trade to make this matter known to the members of the Board. Prices, he says, "should be fixed c. i. f. Bordeaux or Saint-Nazaire. This firm is established in the wine districts of Gironde and Charente where fish, fruit and vegetables are also canned and very large quantities of boxes are required for packing, and I would strongly urge you to impress on the members of the Board of Trade the opportunity which offers of getting a footing on the French market."

The many friends of Mr. W. T. Mason, of Mason, Gordon and Company, Montreal, will regret to hear of his serious illness. Mr. Mason has undergone two operations for stomach trouble, and at one time his recovery was very doubtful. It is, however, satisfactory to learn that at the time of writing he was slowly mending, and that there is every reason to believe that the crisis is passed.

Union Lumber Co.

Limited

1 x 10/12 No. 1 Mill Culls
1 x 4/up Mill Run Spruce—wide average
4 x 5 Spruce

Union Lumber Co., Limited

701 Dominion Bank Building

TORONTO, CANADA

FREE SAMPLE

Stops Bleeding

There's a sample of Douglas' Egyptian Liniment awaiting your request. It's free—absolutely free—along with literature explaining the manifold uses to which it can be put.

No person or animal need bleed unnecessarily where Douglas' Egyptian Liniment is kept. It staunches bleeding immediately.

In cases of toothache, sore throat, neuralgia, rheumatism, etc., it effects immediate relief. In the stable its use is invaluable for thrush, cuts, spavins, calluses, etc.

Send at once for your free sample.

Review of Current Trade Conditions

Ontario

All reports that we have been receiving during the past fortnight continue to speak of steady and encouraging improvement. These we have had from various parts of the province and they reflect a situation which apparently is now general throughout Canada. During the past three months, one manufacturer tells us, market conditions have improved greatly and further improvement is expected to continue steadily up to next spring at least. A number of reports received by the Canada Lumberman indicate that the output in Ontario this winter will again be on a conservative scale, although most of the firms reporting are making a slightly larger cut than they did last winter. This is a reflection of the improved general trade conditions. It is not at all certain, however, that the output will be increased. Some manufacturers are looking for a slight reduction. It seems certain, however, that logging operations will be regulated by a general desire to hold down the production and keep the market on a sound footing. This situation, together with the improvement in the demand, is certain to bring about a fairly steady trade during the winter and a good trade when the spring arrives.

The improvement in the demand for lumber applies to nearly every line. Not only are stocks again moving fairly well, but enquiries are more active and prices are strengthening. One of the large manufacturing firms in northern Ontario advises us that business has been so good recently that practically all of its dry stock has been sold. This firm is looking for continued improvement, basing this expectation upon its order book.

The trade in the country towns has continued to show a steady increase, and, although it is not more active than usual at this time of year, retailers are reporting a fairly healthy movement of stocks and good enquiries, all of which indicate that they will enter the new year under quite favorable conditions. In the large cities the building trade continues rather quiet, but is steadily increasing. The consumption of stocks in manufacturing plants such as furniture factories, piano factories, etc., is better, while the shell box demand also continues on an extensive scale. During the next few weeks the trade will naturally expect something of a lull on account of the approaching end of the year with its usual inventory period.

Eastern Canada

At Montreal, trade continues on the quiet side, the only noticeable activity being in connection with shell box business. General business conditions, however, are more encouraging. Several prominent firms are reporting an increased volume of trade. Building permits for November showed an increase, the first for many months. Present indications are that the total exports from Montreal during the season of 1915 will show an increase of possibly 30,000,000 feet as compared with 1914. The chief increases have been in spruce and birch.

In Quebec the export trade to New York shows some improvement, the local markets are still quiet. There is, however, a good demand for box lumber and birch. The export trade to Great Britain is fair, but buyers are hesitating on account of their fear of excessive rates for shipment when the spring trade opens. The demand for hemlock and pine is very quiet.

There is a firm market for spruce at Boston. Several manufacturers are quoting $26 base, and slightly higher figures when early deliveries are promised. The situation in random is similar, with $21 as the usual price for 2/3. Boards are rather quiet, but quotations are steady. Covering boards 5 in. and up, 8 ft. and up long, are bringing $19, and matched boards 10, 12, 14 and 16 ft., $22 to $23. Hemlock at Boston is improving steadily as a result of the firm prices for southern pine. A few weeks ago hemlock boards were going begging at $19, but no producer will now take less than $21 for eastern clipped boards, 10, 12, 14 and 16 ft. Some manufacturers are asking $22. Good makes of white cedar extra shingles are now bringing $3.40, and others of a really satisfactory extra grade are selling at $3.30. Clears are bringing about $3. Red cedar shingles are about 5c. firmer than they were a month ago. The market for lath is quiet, but steady, 1⅝ in. selling at $4.25 and 1½ in. at $3.50.

United States

Improved conditions in practically all the important industries in the United States continue to be reported and to co-operate in producing better markets for lumber. There has been no interruption to the lumber business during the past fortnight. In fact, the volume of trade is better to-day than during the really active months of normal years. Among the important signs of the times are increased railroad earnings, better buying of equipment, heavy demand for all kinds of iron and steel products, exceptionally large crops, improved cotton market conditions, larger bank clearings and a steady improvement in export. The middle west territory is in a very sound condition financially and there is a steadily increasing distribution of merchandise of all kinds. The lumber business in general is better than it has been at any time during the past year and a half. In the domestic markets the large crops and improved building situation have been the chief factors in bringing this about. Excellent weather conditions have also assisted. Railroads have been placing orders for cars and are to-day facing a possible car shortage. The indications are strong that there will be quite an urgent demand from now until the end of the year, although a slight decrease is possible on account of the approaching inventory period. It is encouraging also to note that the general opinion is that the improved situation will continue during 1916, as fundamental conditions are favorable.

The southern yellow pine industry has been one of the first to feel the trade betterment and manufacturers are looking forward with great encouragement to 1916. Orders and shipments of southern pine continue greatly in excess of production. The strongest feature of the market is the demand for dimension and boards and car material.

Northern pine is also showing much improvement, since it has been relieved of much of its competition. Country yards are coming into the market and are reporting steady business. Prices on all grades have held fairly well of late and are expected to commence the new year firmly, with possibly higher quotations. The hemlock trade is also more active and has shown a steady improvement from last summer's slump. Firmer quotations are being made and Michigan and Wisconsin manufacturers are rapidly getting back into their regular territories. The supply of Pennsylvania hemlock is somewhat short and the demand continues good. The hemlock business, in fact, is more prosperous than it has been for eighteen months back. The outlook is favorable for a strong market in the spring with prices from $1 to $1.50 higher than those at the beginning of November.

The hardwood markets are improving steadily, with a growing demand from consuming industries. Northern hardwood stocks are quite ample for current requirements, but manufacturers are expecting increased business after the new year.

Great Britain

One of the chief questions of interest in connection with the lumber trade in Great Britain to-day is the high price of spruce and the possibility of this price mounting even much higher. The situation is one in which the cost of production has actually nothing to do with the present price. The price to-day is regulated pretty definitely by the value of the service rendered, and spruce renders such an exceptionally valuable service, in the absence of the usual stocks of white wood, that it is no wonder that prices continue to rise. Higher freights have again forced up c.i.f. prices, and everyone believes that spot values will respond to the higher import cost. Liverpool and Manchester stocks on November 1st amounted in round figures to 31,000 standards. The consumption for October was 10,500 standards, so that stocks were just about equal to three months' consumption. On account of the difficulty in transport which has delayed deliveries from stocks, it is not improbable that a large proportion of the 31,000 standards in stock on November 1st were already sold to consumers and not likely therefore, to come on the market, and also that for similar reasons goods on the quays were sold. Stocks in consumers' yards are very low and therefore the figures given above are not at all formidable. In fact it seems certain that the holdings of importers are much below normal.

Considerable activity is reported in the London market. There is a heavy demand for all descriptions of goods, and importers are discussing the probability of a shortage of stock at the close of the freighting season. Values have been rising gradually, and recently the advance has been rather rapid. The indications are that there cannot be any downward movement for a long time to come. The direct causes of this are high freights and the scarcity of steamers. Deliveries at London docks for the week ending November 13th amounted to 9,360 loads, as compared with 11,874 loads during the corresponding week of 1914. At Foy, Morgan and Company's recent auction sale, 2 x 6 unsorted Halifax spruce was sold at £17 5s. At Liverpool, the abnormal activity in the shipbuilding industry has widened the market for silver spruce, which was formerly confined to Glasgow. For some time a number of Liverpool firms have now

View of Mills in Sarnia.

BUY THE BEST

Retailers and woodworking establishments who like to get A1 NORWAY and WHITE PINE LUMBER always buy their stocks from us because we can ship them on quick notice. It pays to have the goods, but it pays better to "deliver" them.

We also make a specialty of heavy timbers cut to order any length up to 60 feet from Pine or B. C. Fir.

"Rush Orders Rushed"

Cleveland-Sarnia Sawmills Co., Limited

SARNIA, ONTARIO

B. P. Bole, Pres. F. H. Goff, Vice-Pres. E. C. Barre, Gen. Mgr. W. A. Saurwein, Ass't. Mgr.

been handling this specialty and there is an increasing enquiry regarding it. The hardwood market at Liverpool is very firm. Some sellers are storing their goods, although they could easily sell them ex quay at a good profit. They are confident of much better prices during the next six months. Consumers apparently will have to face this condition and pay bigger prices. Forward buying on c.i.f. and ex quay terms is now entirely regulated by the cost of freight and the quantity of freight space. At Manchester, the price of timber continues to soar, and yet the consumption is extensive. The high prices are apparently easier to obtain than those which prevailed in the days of cut-throat business.

At Glasgow, the timber market continues strong. There are still large amounts of Government work in progress, consuming good quantities of spruce, red pine, etc. White pine and spruce are still in active request and there is a scarcity of such sizes as 6 in., 7 in. and 8 in. Prices continue upward and are now almost on a similar level to yellow pine. Birch logs and planks are in good demand and stocks are being well absorbed.

Market Correspondence

SPECIAL REPORTS ON CONDITIONS AT HOME AND ABROAD

Montreal Trade More Encouraging

Montreal, December 8th (Special to the Canada Lumberman):—Apart from orders for shell boxes, business is on the slow side, and even for box lumber the sales are not of great volume. This is due to smaller output of the various factories and to the lack of additional orders by the Shell Committee. Some wholesale firms who are anxious to obtain business complain of the attitude of the Shell Committee in refusing to give information as to the factories making boxes, thus placing obstacles in the way of lumbermen who are trying to do a legitimate trade. The criticisms of the Canada Lumberman as to the methods of the old Committee have evidently not been in vain, as it is understood that the new Committee have had under consideration other plans for giving out contracts. Following the precedent in the case of shells, it is reported that the Committee have discussed the question of letting future contracts by tender. This will extend the field of operation, and will give additional box-makers, sash and door manufacturers, and furniture makers an equal chance of securing orders.

Reports as to general business conditions are encouraging while the past year has been a trying one for the lumber trade, some firms have done fairly well, and there are instances where the turnover is above that of last year. The latest building permit returns are exceptionally good, considering the circumstances. For the first time for many months there is an actual increase for the month, the figures for November being $435,745, or a gain of $71,035. For the eleven months the total is $5,441,271, a decrease of $11,836,040.

At the time of writing the exact figures of the exports of the season are not available, but sufficient is known to state that there will be an increase of at least 30,000,000 feet as compared with the preceding season. The slight falling off in pine was more than counterbalanced by the heavy shipments of spruce and birch, the latter showing a relatively higher gain than spruce. The season was an exceptionally difficult one, the high freights and the uncertainty as to space being the outstanding features. The entry of a new firm, the Bennett Lumber Company, was a factor in the larger spruce exports. This firm has now been incorporated with a view to conducting larger operations next season. During the winter months business will be carried on at St. John, N. B.

Reduced Cut Expected in Nova Scotia

Parrsboro, N. S., December 2nd (Special to the Canada Lumberman):—The shipments of deals, battens and scantling from Parrsboro, N. S., during October totalled only 2,471,245 feet. One cargo of 614,127 feet went to Glasgow, and two cargoes aggregating 1,856,518 feet went to Marseilles, France, for orders. Only once before in the history of Parrsboro lumber trade has a cargo of deals been shipped from this port to France, and that was more than a quarter of a century ago. The small shipments during the month were due, not to any scarcity of lumber, for it is estimated that somewhere about fifteen million feet will be held through the winter, but to the unsettled condition of the British market, the great difficulty in obtaining bottoms and the excessive rates of freight.

The exports to the United States during October make even a poorer showing in comparison with other years. They comprise 198,000 feet of spruce boards, 810,000 laths and 1,150 pieces of piling. This is far below the usual exports at this season, and is largely due to the unusual weakness of the American market.

The lumbering prospects for the coming season are by no means bright. Some operators have their prospective cut already sold, and their output will probably be as large as usual. Others will not cut much more than half their usual quantity, and a few of the smaller operators may not cut any. Altogether it is probable that the output in this vicinity will not total more than seventy-five per cent. of the usual cut. But even that will be better than the prospects are in some places, for it is estimated that the total cut in New Brunswick and in some parts of this province will not be more than one-half of last season's output.

The tern schooner Exilda, a Parrsboro owned vessel of 349 tons register, has made something of a record for herself this season. She sailed from this port for England on the 17th of March with a cargo of deals, which she delivered safely. Since that time she has taken two other cargoes across, and she arrived here December 1st to take on her fourth cargo. It is doubtful whether many square-rigged vessels have beaten this record.

Marked Improvement in Ottawa Trade

Ottawa, Dec. 8th (Special to the Canada Lumberman):—Both manufacturers and wholesalers here report that during the past fortnight there has been a marked improvement in the lumber trade generally. The export trade particularly seems to have been picking up considerably and not only have inquiries been more numerous, but there have been more orders placed in the city from outside points during the last thirty days, than there have been for the past nine months. The woods operations are in good swing and the manufacturers say that all they desire for the next few weeks is snow. The heavy snowfall here, lasting over the last forty-eight hours, would indicate anything but disappointment to them in this respect.

There has been a noticeable improvement in the trade with the United States. Wholesalers and manufacturers are quite freely sending out large orders of lumber suitable for the box trade, including birch and certain lengths of spruce, to different parts of the States. Looking after these outside orders, in addition to taking care of the local demands for the same timber, is providing work for the mills, and keeping everyone busy.

While local lumbermen do not anticipate any abnormal increase in trade they figure on a steady demand for lumber during the winter months and will deal considerably in spruce, birch and other box lumber. The prices are remaining quite steady, with a slight advance in some lines including spruce and red pine.

Heavy investments have been made by Ottawa lumbermen in the Canadian war loan. Sir Henry Egan of the Hawkesbury Lumber Co., Messrs. J. R. Booth and E. C. Whitney, leading members of the lumber trade and prominent throughout the Dominion, have already subscribed sums amounting to an average of $100,000 each, and many other local lumbermen, including the Fraser-Bryson Lumber Co., have also invested.

Montreal Lumber Association Annual Meeting

Montreal, December 7th (Special to the Canada Lumberman):—Mr. Arthur H. Campbell presided over the annual meeting of the Montreal Lumber Association, held on December 6, at the Board of Trade. The president's report referred in detail to the application by the railways in the early part of the year for increased freight rates east of Fort Wliliam and to the action taken by the association in strongly opposing the increases before the Railway Commission.

On December 10th, 1914, the Railway Commission cancelled a C. P. R. embargo on lumber shipped from points on the C. N. R., Intercononial and G. T. R., when destined for team track delivery at Mile End. Notwithstanding this decision, members stated at meetings of the association that the C. P. R. still refused to accept from its connections cars destined for team track delivery at Mile End, and on two or three occasions these complaints were referred to the Commission, but the association had no information as to what action the commission took.

The question of the allowances from track scale weights on lumber and wet wood pulp, together with the whole question of demurrage, including the proposed reciprocal and average systems, still awaited action on the part of the Railway Commissioners.

In dealing with the season's export business, Mr. Campbell

Shell Box Lumber

DRY BIRCH

WE have in stock approximately three (3) million feet of 4/4-8/4 and 12/4 Birch sawn during seasons of 1913-1914 and 1915. This is particularly suitable for manufacturing or Boxing purposes as it was sawn partially square and partially round or live edged.

We have extensive Kiln Drying, Resawing and Dressing Plants and can work to order.

DRY SPRUCE BOARDS

We carry the largest and best assorted stock in Canada.

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Sales Office:
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SAYABEC, QUEBEC

pointed out that the trade had been upset by the war, but that there had been a large demand for spruce and hardwood for war purposes. The ocean freight rates were extremely high, as much as 200s. per standard having been paid to British ports, as compared with an average of from 35s. to 45s. in an ordinary year. Even at these enormous rates it was frequently impossible to secure the space required.

For several months before the opening of the war in August 1914, the local trade felt the lessening of the demand which resulted from the break of the building boom, and business had been steadily falling off. On the outbreak of the war the lumber industry was one of the greatest sufferers on account of the entire cessation of building operations. Last winter and spring, business was at its lowest ebb, but towards mid-summer, when large shell contracts were being filled in Canada, slight recovery was experienced owing to the demand for lumber for shell boxes and crating purposes, and the local trade improved each month until November as a result of this special demand, and of the general improvement in trade throughout the Dominion. Building trade showed little signs of improvement in the city, but in the country districts, owing to good crops and high prices for farm products, there was as much building as usual. The demand for lumber for war purposes had benefited chiefly the trade in spruce, hardwood, and common grades of white pine.

The following officers were re-elected: President, Mr. Arthur H. Campbell; vice-president, Mr. P. D. Gordon; treasurer, Mr. S. W. Cotter; directors, Messrs. Geo. Esplin, W. A. Filion, B. H. McLennan, and T. J. Rutherford. Mr. Campbell was chosen as the Association's nominee for election on the Council of the Montreal Board of Trade.

After the meeting the members of the Association lunched together at the Canada Club.

Practical Forest Fire Prevention

How the St. Maurice Protective Association carries out its Work—Valuable Results Secured

By Henry Sorgius, Manager

In the fall of 1911, the leading lumbermen of the St. Maurice Valley met to discuss forest protection. In former years, certain limit holders in this section were dissatisfied with the patrolling system that existed at that time as a few of the companies totally neglected to place men on their limits to guard them against fire.

These lumbermen then agreed to form a forest protective association, the ranging to be governed by one head. This was done, and in March, the provincial charter was obtained and the first meeting was held on the twentieth of March.

The Manager took up his duties on the above date and preparation for the season's work was commenced. The various offices of the associate members were visited and much valuable data and maps were collected. The name of probable fire ranger inspectors and fire rangers were taken and placed on file.

At the directors meeting on April 6th, a working plan was presented. The territory was divided into three divisions. Each division was subdivided into districts. Each division was under the supervision of an inspector whose duties were to see that the rangers in his charge cover their respective districts during the dry weather and cut out and clean trails, erect look-out stations and string telephone line during the wet season.

In 1913, more limits were added to the Association and another inspector was employed to help with the work. In 1914, two more inspectors were added to the force to help oversee the ranging in our ever-increasing territory. In one division this past season, the inspector did his inspecting in an automobile wherever there was a road leading into the ranger's district. The auto has proven that it has cost less to keep up than a horse.

Method of Patrol

Each district was patrolled either by two men in a canoe, a man on horse-back or a man on foot. The very best of results were obtained by this method. The sizes of districts that rangers have to patrol are determined according to the fire hazard in that particular centre.

The total number of acres patrolled by the Association to date is 7,892,766 or 12,332 square miles.

This last season, the rangers patrolling the settled districts, were furnished with dodgers in the early spring which asked the settler to co-operate in the burning of his slash, thereby lessening the fire danger.

Colored dodgers were also printed and, as in the case of the plain ones, a house-to-house canvas was made and every man in the various parishes under our supervision, received one of them. Circular letters were written to the Cures of these parishes asking them to explain to their people exactly what we wished them to do and the penalty for disobedience. Splendid results were obtained by this method and by the use of burning permits, as the following record speaks for itself: 1914, 80 fires; 1915, 41 fires. This shows a clear decrease of about fifty per cent. in the fires. Two more years of this system, and the settlers will be accustomed to our method of controlling the burning of slashings. We firmly believe that at the end of this time, very few settlers will trouble us with fires.

The section that is traversed by the National Transcontinental Railway is also patrolled by us. A distance of one hundred and sixty-seven miles is under our control. Five motor speeders, two men to a car, follow up all trains in their respective districts, twenty minutes after their departure.

This past season, all fires caused by engines were thirty-five in number. These fires were all extinguished by our rangers without the aid of extra labor, excepting one small fire.

Equipment was purchased for fire fighting purposes such as pails, shovels, grub hoes and axes. These articles were distributed to the various inspectors and were placed at most accessible points.

Look-out stations have been erected throughout the territory at the most advantageous points, i.e., points of observation which aid us most in patrolling the more dangerous fire centres.

We have found that an observation, placed at points which overlook settled territory and territory inhabited by river drivers is a money-saving scheme in more than one way. It helps to cut down our staff of fire patrols and still retain the proper efficiency of forest patrol.

Twenty Look-outs

At present we have twenty look-out stations erected, and by the end of next season we hope to have all the stations connected by telephone lines.

To date four hundred and six miles of telephone line has been constructed. The telephone has proven a great boon to forest protection and much valuable timber has been saved from fire by its timely use.

During the season of 1912 the employees of the Association put out 108 forest fires. The season was a wet one. In 1913 three hundred and five fires were extinguished. This season, as were the seasons of 1914 and 1915, was a very dry one, with long droughts. In the season of 1914 two hundred and thirty-one fires were extinguished, and in 1915 one hundred and sixty-nine fires.

The cost of patrol has never exceeded one-quarter of one per cent. per acre since the Association has been in existence.

It has been proven conclusively that the limit holders have been given cheaper and more efficient patrol and protection by the co-operative system than by any independent method which has ever been tried out in this section.

The best proof of this statement is that the limit holders of the Lower Ottawa formed a forest protective association after learning of the benefits the lumbermen of the St. Maurice Valley derived by a co-operative system.

We can safely say that we have saved thousands of dollars worth of merchantable timber, not to mention the young growth, and we are going to save thousands more.

Improvement General in Western States

The improved trade situation in the Western States is well indicated in a report which we have received from the Diamond Iron Works of Minneapolis. Western lumber manufacturers, they state, are looking forward to a marked increase in the demand for their products. During the past few months the demand has improved to such an extent that mills which were idle a few months ago, or running on short time are now being operated at full capacity, and some manufacturers do not expect to be able to supply the requirements with their present equipment. A large number of new sawmill projects are now under consideration or in progress.

The Brooks-Scanlon Lumber Company of Minneapolis have recently completed plans and have closed a contract for the machinery for a large mill at Coeur d' Alene, Idaho. The Diamond Iron Works of Minneapolis have the contracts for furnishing the complete equipment for these mills and they report that the demand for sawmill machinery is steadily increasing. They have at present on their books many more orders for sawmill and transmission machinery than at any time for several years past. The company anticipated this improvement in the demand for mill equipment and have refused to consider several offers made to them during the past summer to take on contracts for war munitions. They decided quite early that in order to take care of their regular line of trade they would have to adopt this policy, and their diagnosis of the trade situation has been amply justified.

Serviceable, Durable, Mackinaw Clothing

The Better Grade Qualities At Lowest Prices.

Cut No. 1

Mackinaw Coats

BIRD'S Pure Wool Mackinaw Coats, as cut No. 1. Made with high seven inch collar, close fitting with tab at throat. Sizes 36 to 46.

WOOD'S Pure Wool Mackinaw Coats, made as cut No. 1. Khaki, Olive, Green and Black. Seven inch notch collar.

BIRD'S Pure Wool Black Mackinaw Coats. Large shawl collar, loose belt with buckle. This coat is 35 inches long and has three large flap pockets.

Men's Mackinaw Knickers

MEN'S Mackinaw (Bird's Pure Wool) Knickers, as cut No. 7. Black shades only. Top and hip pockets. Strap or wool cuff. Very convenient and comfortable wearing. Sizes 32 to 44.

Cut No. 7

Prices on Application

Smart-Woods LIMITED

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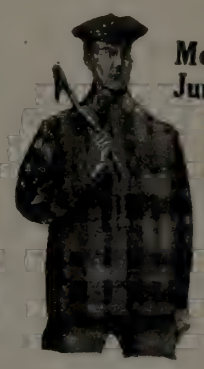

Cut No. 5

Men's Mackinaw Jumpers

MACKINAW Jumpers, as cut No. 5, for lumbermen and sportsmen. This jumper is to take the place of the old rolled neck sweater and is very much more serviceable. It is light in weight, buttons close up to neck and has many advantages over both coat and sweater.

Jenckes Boilers

We make a Specialty of

Horizontal Tubular Boilers

for Saw Mill work. They are made in an extensive plant built and equipped for the purpose with all modern appliances.

The three prime elements of Design, Material and Workmanship receive equal and most painstaking attention, ensuring a boiler warranted to give perfect satisfaction and long service.

The Jenckes Machine Co., Limited

Sherbrooke Montreal Cobalt So. Porcupine St. Catharines Toronto Vancouver Nelson

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WHOLESALE LUMBER
SANS-DIEU-RIEN
MONTREAL - Canada
Head Office at Montreal.

SPRUCE rough or dressed

1" No. 2 and Better Birch, 1914 cut
also Basswood, Hemlock and Pine

Saw Mills at MONT LAURIER.
Dressing Mills at ST. JEROME.

Herman H. Hettler Lumber Co.
Midland, Ont.

Manufacturers of

WHITE PINE and RED PINE LUMBER and LATH

EXCELLENT PLANING MILL FACILITIES

Special Attention Given to Prompt Delivery

CEDAR
Shingles

Campbell, MacLaurin Lumber Co.
Limited
Board of Trade Building, MONTREAL

Pine, Spruce Hemlock Hardwoods, Lath

GOOD STOCKS PROMPT SHIPMENTS SATISFACTION

C. A. SPENCER, LIMITED

Wholesale Dealers in Rough and Dressed Lumber, Lath and Shingles
Eastern Townships Bank Building, MONTREAL, Quebec

EDGINGS

Ontario

Keenan Bros. Ltd., are installing a Clark Bros. horizontal band resaw in their mill at Owen Sound, Ont.

The woodworking factory belonging to W. H. Carson, Oakville, Ont., was recently destroyed by fire at a loss of $5,000. Mr. Carson will have the building repaired at once.

The New York & Pennsylvania Company, Toronto, Ont., have been incorporated with authorized capital of $200,000 to carry on business as manufacturers of paper and wood pulp.

The office of the Canadian Pulp and Lumber Company which has been located at Latchford, Ont., for the past two years. has been moved to Haileybury and the plant at Latchford has been closed down for the winter.

The sawmill at Balaclava, near Perth, Ont., belonging to Harry Richards, was recently destroyed by fire together with about 3,000,000 feet of lumber. The amount of the loss is estimated at about $50,000 and there was no insurance.

A report from Rainy River, Ont., states that a new sawmill, planing mill, shingle factory, box factory, etc., will be operated there in the near future. It is expected that the building will be erected this fall and that ouerations will commence next summer giving employment to about 20 hands all the year round.

The Northland Trading Company Ltd., has been incorporated with head office at Sault Ste. Marie, Ont., and authorized capital of $40,000, to carry on lumber, timber. and pulpwood business in addition to contracting, fishing and general trading. The provisional directors are W. F. Langworthy, A. J. McComber, barrister, E. E. Allen, B. E. King and L. McComber.

The new mill of the Hardwood Specialties Limited, of Pembroke, Ont., replacing the one destroyed by fire in August, has commenced operation. The Radcliff Saw Manufacturing Co. Ltd., of Toronto, secured the full order for saw equipment for the the mill including fifteen 8-inch band saws, two 60-inch inserted tooth saws, four 60-inch cut-off saws and 200 small circulars.

Mr. D. McLachlan, of McLachlan Brothers, Arnprior, Ont., announces that a pulp and paper mill will be added to their business within a short time, or some other firm will purchase their limits with a view to going into this industry exclusively. The firm has under consideration the erection of a mechanical pulp plant at an expenditure of half a million dollars. The McLachlan firm has piling grounds at the confluence of the Ottawa and Madawaska rivers, with a capacity of more than 70,000,000 feet of lumber. While a great deal of the largé timber on the limits has been cut, a vast amount of pulpwood is intact. Mr. D. McLachlan estimates that there is sufficient pulpwood to keep a hundred ton mechanical mill going almost indefinitely. An offer for the mill, grounds and limit was recently made by the J. R. Booth Company of Ottawa, it is understood, and Senator W. C. Edwards has also been negotiating for the purpose of erecting a pulp and paper plant at Arnprior.

Eastern Canada

John A. Morrison, Fredericton, N. B., will cut 9,000,000 feet for the St. John Lumber Company this winter.

Albert M. Currier, Seven Islands, P. Q., will cut 4,000,000 feet for Stetson Cutler & Company of St. John, N. B.. this winter.

Robert J. Potts of Hartland, N. B., will cut 7,000,000 feet for the St. John Lumber Company, of Van Buren, Me., this winter.

W. H. Cumliffe's Sons, Fort Kent, will cut 10,000,000 feet for Stetson Cutler & Company of St. John, N. B.. this winter.

Arthur L. Noble, Fredericton, N. B., will cut 5,000,000 feet this winter for the Stetson Cutler Company of St. John. N. B.

Flavien Chouinard, St. Pamphilo, P. Q., will cut 6,000,000 feet for the St. John Lumber Company of Van Buren, Me., this winter.

J. Lewis & Sons Ltd., have been incorporated with head office at Truro, N. S., and capital stock of $100,000 to carry on business of lumbering, manufacturers of wood, etc.

The Richards Mfg. Company, Campbellton, N. B., started up their winter mills at Kedgewick towards the end of November. Their mill at Richardsville was closed down for the winter about the same time.

The sawmill and factory belonging to M. Arthur, St. Antoine, P. Q., was recently destroyed by fire. The amount of the loss and insurance is not yet known. Mr. Arthur will rebuild and will require a complete outfit of machinery.

The Beauce Pulp and Lumber Company, 68 St. Peter St., Quebec, P. Q., report that they have sold their sawmill at Scott's Junction, P. Q.. to the

Brown Corporation of Portland, Me., who operate a large plant at La Tuque, P. Q.

The cardboard mill of the Macleod Pulp Company Ltd., Milton, N. S., was destroyed by fire on December 1st. The loss amounted to $150,000 which was covered by insurance. The pulp mills were saved. Some 40 employees are thrown out of work by the fire.

Philip N. LeBlanc Ltd., has been incorporated with head office at Moncton, N. B., to carry on business as loggers, lumber manufacturers, etc. Those interested are P. N. LeBlanc, V. LeBlanc, J. A. LeBlanc and J. N. LeBlanc, all of the city of Moncton. The capital stock of the company is $25,000.

The Bennett Lumber Company Ltd., has been incorporated with head office at Montreal, P. Q., and capital stock of $50,000. to carry on business as manufacturers and dealers in lumber, timber, etc. Those interested are E. A. Wright and G. B. Kingan of Westmount, H. MacKay, E. G. Place, and M. Z. Pilon, of Montreal.

The schooner H. S. M. owned by Henry S. Mallet of Port Gilbert, N. S., was recently wrecked off Galloupes Point, where it grounded and was pounded to pieces. Its cargo of 150,000 feet of lumber, valued at $2,250 was lost. This loss and the value of the schooner, $4,000, were both partly covered by insurance. The crew of the schooner escaped.

Sullivan's mill. Nelson, N. B., was closed down for the season during the last week of November. It commenced sawing this year about June 1st and was operated night and day without interruption employing about 100 men. Mr. Sullivan intends to make extensive improvements to the plant in the near future. This plant had formerly been idle for six years.

A despatch from Bangor, Me., states that the disturbed condition of the lumber market and the poor outlook for operators on the St. John and Allegash in Maine is inducing most of the operators to reduce their cut this winter by about 50 per cent. The total cut in Maine on these waters will be about 52,500,000 feet, 1,000,000 of which will be cedar. Much of this stock will be manufactured at Van Buren by the St. John Lumber Company, whose estimated output will be 32.000,000 feet. About 19,500,000 feet will go down the St. John River to Stetson Cutler & Company of St. John, N. B. The other million, cedar, will be cut by St. Frances operators and manufactured at local mills.

Fraser Limited, who recently purchased the Timothy Lynch Company Limited property, on the Miramichi Waters, will erect a new mill on the site of the present Lynch Mill at Nelson, N. B. The new mill will be equipped with a twin band for slabbing the logs, twin band resaw for sawing up the stock. One horizontal band resaw for sawing slabs from band mill. Three edgers, together with the usual trimmers, slashers and two lath machines. The estimated output will be one hundred to one hundred and twenty thousand feet of long lumber per day. Fraser Limited propose manufacturing lumber at this mill almost exclusively for the European and South American markets, as the facilities for shipping by water are exceptional. Large ocean steamers can be moored at the mill wharf, not more than a hundred feet from the mill. The company have also ample piling ground to pile twenty-five million feet, and they intend drying their lumber before shipment.

Western Canada

The Cutler Shingle Mill at Pitt River, B. C., has been purchased by Messrs. J. H. McLean and W. Johnston of Port Moody, B. C.

The Yahk Lumber Company opened its sawmill at Wasa. B. C., early in December, intending to operate during the balance of the winter.

Anton Wahl is erecting a portable plant near Shelbrook, Sask. He is putting in camps near the mill and expects to be ready for work by the new year. He is also putting in a planing shop adjoining the mill.

A report from Nakusp, B. C., states that Mr. Westcott of Vancouver will probably establish a shingle mill equipped with six machines at that point. This would give employment to 25 or 30 men in the mill and a similar number in the woods.

The United Paper Products Company Ltd., has been incorporated with head office at Vancouver, B. C., and capital stock of $100,000. The objects of the company among other things are to cut logs, manufacture and deal in timber, logs, lumber and lumber products of all kinds.

The Indian Lake Lumber Company Ltd., has been incorporated with head office at Winnipeg, Man., and capital stock of $100,000, to carry on business as wholesale and retail lumber merchants, to own and operate sawmills and planing mills and to manufacture and deal in all products of the forest.

James Worswick Company Ltd., has been incorporated with head office at Winnipeg, Man., and capital stock of $75.000 to carry on business as sawmill proprietors, woodworkers, lumber merchants, and owners and dealers in timber lands, etc. Those interested are J. Worswick, W. H. McNab, J. Coupar, W. D. Robertson and A. Smith, all of Winnipeg.

F. E. Neale, Chatham, N. B., in a recent interview stated that operations this winter along the North Shore of New Brunswick will not be so large as usual. Business along the North Shore has been quite active during the year, but much profit has been wiped out by the high shipping rates.

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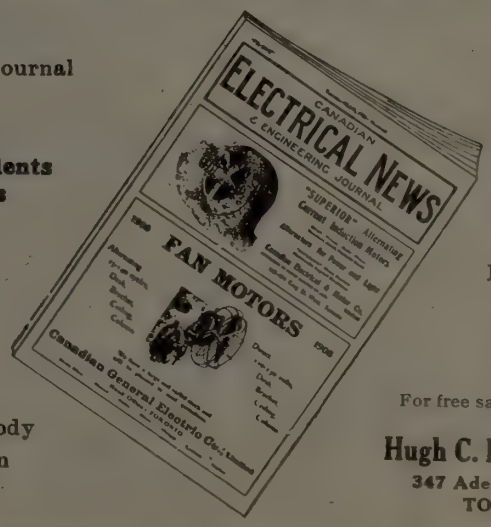

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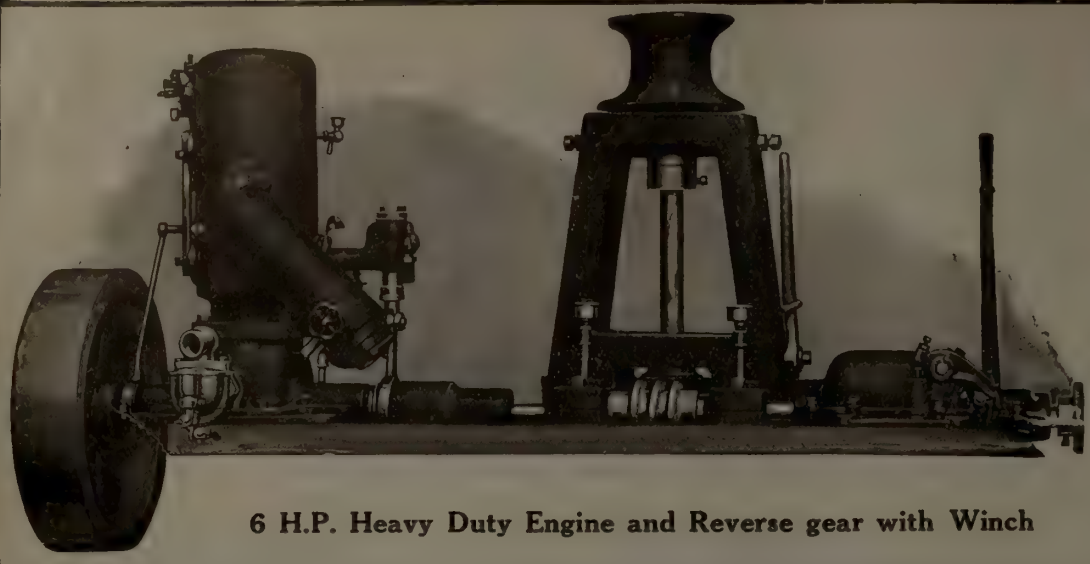

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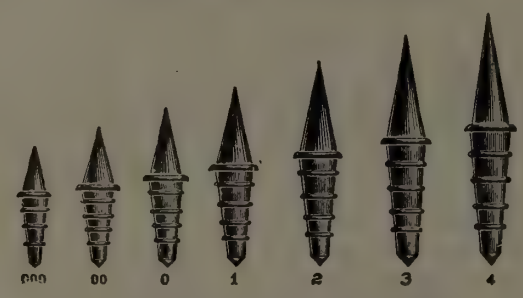

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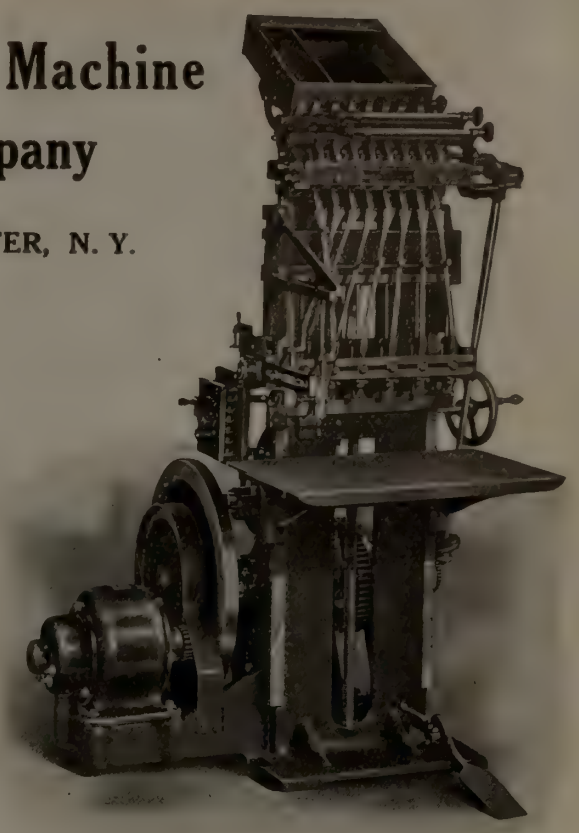

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2-in. No. 2 cuts and better	47 00	49 00
4/4 No. 2 and 3 cuts		31 00
5/4 and 6/4 No. 2 and 3 cuts		37 00
8/4 No. 2 and 3 cuts		38 00
1-in. Good Shorts	35 00	40 00
1 x 4 and 5 com. and dressing	26 00	27 00
1 x 6 common and dressing	27 00	29 00
1 x 8 common and dressing	27 00	29 00
1 x 10 common and dressing	31 00	32 00
1 x 12 common and dressing	32 00	34 00
1 x 10 and 12 mill cull stocks		23 00
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5/4 and 6/4 x 5 m.r., m.c. out		28 00
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2 x 10 common		28 00
2 and 3 x 12 common		30 00
1 x 8 box and common	23 50	24 50
1 x 10 inch box and common	25 00	26 00
1 x 12 inch box and common		27 00
1-in. mill run sidings	25 00	27 00
1-in. mill run shorts		22 00
1-in. mill run Norway		22 00
2-in. mill run Norway		23 00
Norway, c and cf. 1-in.		32 00
Norway, c. and cf. 1½-in.		32 00
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1-in. No. 2, 6-ft. to 16-ft.		16 00
2 x 4 to 12, 10 and 16 ft.		19 00
2 x 4 to 12-in., 12 and 14 ft.		19 00
2 x 4 to 12-in., 18 ft.		22 00
2 x 4 to 12-in., 20 ft.		24 00
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6x14, 8x14, 12x18, 18x20, up to 32 ft.		32 50
6x16, 8x16, 10x18, 12x20, 14x20, 16x20 up to 32 ft.		33 00
10x20, up to 32 ft.		33 50
6x18, 8x18, up to 32 ft.		34 00
6x20, 8x20, up to 32 ft.		35 00

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1½-in. 32-in. pine		2 65
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XXXX 6 to 23-16-in.		3 10
XXXXX		3 35

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Ash, brown, 1sts and 2nds, 6/4 & 8/4.	60 00
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Birch, No. 1 com. and bet., 4/4	30 00
Birch, 1sts and 2nds, 6/4 and 8/4	42 00
Birch, 1sts and 2nds, 10/4 and 12/4	45 00
Birch, 1sts and 2nds, 16/4	50 00
Basswood, 1sts and 2nds, 4/4	40 00
Basswood, No. 1 com. and bet., 4/4	30 00
Basswood, No. 2 and 3, common	18 50
Basswood, 6/4 and 8/4, 1sts and 2nds.	44 00
Basswood, 6/4 and 8/4, com. and bet.	38 00
Basswood, 4/4, No. 2 com. and bet.	28 00
Soft elm, 1sts and 2nds, 4/4	40 00
Soft elm, No. 1 com. and bet., 4/4	28 00
Soft elm, No. 2 and 3 common	17 50
Soft elm, 6/4 and 8/4, 1 and 2	42 00
Rock elm, 1sts and 2nds, 6/4 x 8/4.	55 00
Rock elm, No. 2 com. and bet. 6/4 and 8/4	37 00
Soft maple, 1sts and 2nds, 4/4	33 00
Soft maple, com. and bet., 4/4	25 00
Soft maple, 6/4 & 8/4, 1sts and 2nds.	35 00
Hard maple, 1sts and 2nds, 4/4	37 00
Hard maple, common and better, 4/.	28 00
Hard maple, 12/4 & 16/4, 1sts and 2nds.	46 00
Red oak, plain 1sts and 2nds, 4/4	59 00
Red oak, plain 1sts and 2nds, 6/4 & 8/4	65 00
Red oak, plain 1sts and 2nds, 12/4 and 16/4	75 00
White oak, plain, 1sts and 2nds, 4/4.	59 00
White oak, plain, 1sts and 2nds, 1½ and 2-in.	65 00
White oak, plain, 1sts and 2nds, 12/4 and 16/4	75 00
White oak, ¼ cut, 1sts and 2nds, 4/4.	85 00
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OTTAWA, ONT.

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No. 2 cuts 2 x 8-in. and up	40 00	42 00
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1-in.	38 00	40 00
1¼-in. and 1½-in.	50 00	52 00
2-in.	52 00	55 00
Pine good shorts:		
1-in. x 7-in. and up	40 00	42 00
1-in. x 4-in. to 6-in.	30 00	33 00
1¼-in. and 1½-in.	50 00	54 00
2-in.	52 00	54 00
7-in. to 9-in. A sidings	25 00	27 00
Pine, No. 1 dressing sidings	30 00	33 00
Pine, No. 1 dressing strips	29 00	30 00
Pine, No. 1 dressing shorts	22 00	24 00
Pine, 1-in. x 4-in. s.c. strips	22 00	23 00
Pine, 1-in. x 5-in. s.c. strips	24 00	25 00
Pine, 1-in. x 6-in. s.c. strips	23 00	24 00
Pine, 1-in. x 7-in. s.c. strips	23 00	24 00
Pine, 8 s.c., 12 ft. to 16 ft.	25 00	26 00
Pine, 1-in. x 10-in. M.R.	27 00	28 00
Pine, s.c. sidings, 1½ and 2-in.	28 00	30 00
Pine, s.c. strips 1-in.	21 00	23 00
1¼, 1½ and 2-in.	24 00	26 00
Pine, s.c. shorts, 1 x 4 to 6 in.		20 00
Pine, s.c. and bet., shorts, 1 x 5	20 00	21 00
Pine, s.c. and bet., shorts, 1 x 6	20 00	21 00
Pine, s.c. shorts, 6'-11' 1"x10"	23 00	24 00
Pine, box boards:		
1" x 4" and up, 6'-11'	17 50	18 00
1"x3" to 6", 12'-16'	19 00	20 00
Pine mill culls, strips and sidings, 1-in. x 4-in. and up, 12-ft. and up	17 00	19 00
Pine mill culls stock 1 x 12	21 00	22 00
Mill cull shorts, 1-in. x 4-in. and up, 6-ft. to 11-ft.	17 00	18 00
O. culls r & w p	15 00	17 00
Red pine, log run:		
mill culls out, 1-in.	18 00	20 00
mill culls out, 1¼-in.	19 00	21 00
mill culls out, 1½-in.	19 00	21 00
mill culls out, 2-in.	22 00	24 00
Mill culls, white pine, 1"x7" and up	20 00	21 00
Mill run Spruce:		
1"x4" and up, 6'-11'	17 00	18 00
1"x4" and up, 12'-16'	18 00	20 00
1"x9"-10" and up, 12'-16'	22 00	24 00
1¼"x7" 8-9" and up, 12'-16'	22 00	24 00
1¼"x10" and up, 12'-16'	22 00	24 00
1½" & 2"x12" and up, 12'-16'	25 00	26 00
Spruce 1-in. clear (fine dressing and B)	25 00	27 00
Hemlock 1-in. cull	13 00	15 00
Hemlock 1-in. log run	17 00	20 00
Hemlock 2x4, 6, 8, 10, 12/16'.	19 00	23 00
Tamarac	19 00	20 00
Basswood log run, dead culls out	22 00	24 00
Basswood log run mill culls out	23 00	26 00
Birch log run	19 00	22 00
Soft elm, common and better, 1, 1½, 2-in.	20 00	24 00
Ash, black, log run	25 00	28 00
1 x 10 No. 1 barn	33 00	36 00
1 x 10 No. 2 barn	23 00	26 00
1 x 8 and 9 No. 2 barn	22 00	23 00
Lath per M:		
No. 1 white pine 1½-in. x 4-ft.	4 25	4 50
No. 2 White Pine	3 80	3 95
Mill run white pine	4 00	4 25
Spruce, mill run 1½-in.	3 25	3 50
Red pine, mill run	3 60	3 70
Hemlock, mill run	2 75	3 00
32-in. lath	2 00	2 00
Pine Shingles		
xxxx, 18-in.	3 00	3 50
Clear butt 18-in.	2 50	3 25
xx		1 75
White Cedar Shingles:		
xxxx, 18-in.	3 75	4 25
Clear butt, 18-in.	3 00	3 50
18-in. xx		2 00
Spruce logs (pulp)	13 00	15 00

QUEBEC, QUE.

	cts.	
White Pine		
First class Ottawa waney, 18-in. average, according to lineal	60	65
Oak		
According to average and quality	60	70
Elm		
According to average and quality, 40 to 45 feet	70	75
According to average and quality, 30 to 35 feet	50	60
Ash		
13 inches and up, according to average and quality, per cu. ft.	25	30
Average 16 inch	30	40
Birch		
14 inch, per cu. ft.	20	22
15 inch, per cu. ft.	24	26
16 inch, per cu. ft.	28	30
18 inch, per cu. ft.	32	35

Quebec Spruce Deals

12 ft. and up x 3 x 9 and up.	$22 00	23 00
Oddments	17 00	18 00
Boards, 1 and 2 in.	16 00	18 00
Birch Planks		
1 to 4 in.	16 00	18 00

SARNIA, ONT.

Fine, Common and Better

1 x 6 and 8 in.	$54 00
1 in., 8 in. and up wide	62 00
1¼ and 1½ in. and up wide	65 00
2 in. and up wide	70 00
Cuts and Better	
4/4 x 8 and up No. 1 and better	55 00
6/4 x 8 and up No. 1 and better	65 00
8/4 x 8 and up No. 1 and better	65 00
6/4 x 6 and up No. 2 and better	52 00
8/4 x 6 and up No. 2 and better	54 00
6/4 x 6 and up No. 3 and better	46 00
8/4 x 6 and up No. 3 and better	50 00
No. 1 Cuts	
1 in., 8 in. and up wide	42 00
1¼ in., 8-in. and up wide	55 00
1½ in., 8-in. and up wide	57 00
2 in., 8-in. and up wide	60 00
2½ and 3 and 8-in. and up wide	75 00
4 in., 8-in. and up wide	85 00
No. 2 Cuts	
1 in., 6-in. and up wide	31 00
1¼ in., 6-in. and up wide	42 00
1½ in., 6-in. and up wide	44 00
2-in., 6-in. and up wide	47 00
2½, 3 and 4 in., 6-in. and up wide	62 00 65 00
No. 3 Cuts	
1 in., 6-in. and up wide	24 00
1¼ and 1½ in., 6-in. and up wide	33 00
2-in., 6-in. and up wide	33 00
2½, 3 and 4-in., 6-in. and up wide	43 00 48 00
Common and Dressing Mill Run	
1-in. x 4-in.	25 00
1 in. x 5-in.	25 00
1-in. x 6-in.	26 00
1-in. x 8-in.	27 00
1-in. x 10-in.	29 00
1-in. x 12-in.	34 00
1 in. x 13 in. and up	34 00
1¼, 1½ and 2-in.	30 00
No. 1 Barn	
1 inch	31 00 45 00
1¼, 1½ and 2-in.	36 00 45 00
2½ and 3-in.	45 00
4 inch	50 00
No. 2 Barn	
1 inch	28 00 36 00
1¼, 1½ and 2-in.	30 00 36 00
2½ and 3-in.	38 00
No. 3 Barn	
1 inch	21 00 28 00
No. 1, 1, 1¼, 1½, 2-in.	20 00 25 00
Box	
No. 1, 1, 1¼, 1½, 2-in.	22 00 25 00
No. 2, 1¼, 1½, 2-in.	19 00 23 00
Mill Culls	
Mill run culls, 1-in.	19 00
1, 1¼, 1½ and 2-in.	20 00
No. 2	17 00 18 00
Lath	
No. 1, 32-in. pine	1 75
No. 2, 48-in. pine	4 25
No. 1, 48-in. pine	4 75
No. 3, 48-in. pine	3 75

WINNIPEG, MAN.

No. 1 Pine, Spruce and Tamarac

Dimension	S. 1 S. and 1 E. 6 ft.	8 ft.	10 ft.	14x16 ft.
2 r 4, 6, 8	14 00	17 00	20 50	18 50
2 x 10	18 00	18 50	21 50	19 00
2 x 12	18 00	19 00	23 50	20 00

Dimension in the rough or surfaced one side 50c. per M. extra.

FIR, HEMLOCK, SPRUCE AND LARCH

Mountain Stock

Dimension

2 x 4, 8, 12, 14, 16	18 50
2 x 4-10-18-20	20 50
2 x 6, 8 to 16	18 50
2 x 8, 8 to 16	18 50
2x4-6 and 8-in.; 24,26,28, 30, 32 ft.	26 50
2 x 10 and 2 x 12; 8-16 ft.	23 50
2 x 10 and 2 x 12; 18, 20, 22 ft.	25 50
2 x 10 and 2 x 12; 24, 26, 28, 30, 32 ft.	27 50
No. 1 Common Boards	
4 inch	19 00
6 inch	21 50
8, 10, 12 inch	23 50
Mixed widths	22 50
Flooring	
4 or 6 inch No. 1	33 00
4 or 6 inch No. 2	31 00
4 or 6 inch No. 3	25 00
Shiplap—Finished	
6 inch	20 00
8, 10 and 12 inch	21 00
Siding	
6 inch No. 1	33 00
6 inch No. 2	31 00
6 inch No. 3	21 50
Lath	
No. 1 Cedar, pine, spruce (not mixed)	4 00
No. 1 Cedar, pine, spruce (mixed)	3 50

PINE—ROUGH TIMBER

3 x 6 in.; 8 to 16 ft.	25 10
3 x 8 in.; 8 to 16 ft.	22 00
3 x 12, 4 x 4, 6 x 6 in.; 8-16 ft.	25 00
4 x 10 to 10 x 10, 8 x 8, 6 x 12 in. up to 32 ft.	27 00

BRITISH COLUMBIA COAST FIR

Dimension S. 1 S, and E.

2 x 4 in.; 6 and 8 ft.	17 50
2 x 4 in.; 12 x 14 ft.	18 50
2 x 4 in.; 10 x 16 ft.	19 50
2 x 4 in.; 18 x 20 ft.	20 50
2 x 4 in.; 22 x 24 ft.	21 50
2 x 4 in.; 26 x 32 ft.	23 50
2 x 10 and 2 x 12 in.; 10 to 16 ft.	20 00
2 x 10 and 2 x 12 in.; 18 and 20 ft.	22 00
2 x 10 and 2 x 12 in.; 22 and 24 ft.	23 00
2 x 10 and 2 x 12 in.; 26 to 32 ft.	25 00
2 x 14 in.; 10 to 16 ft.	25 00
2 x 14 in.; 18 and 20 ft.	27 00
2 x 14 in.; 22 and 24 ft.	28 00
2 x 14 in.; 26 to 32 ft.	30 00
3 x 3 and 3 x 4 in.; 8 to 14 ft.	21 00
3 x 3 and 3 x 4 in.; 8 to 16 ft.	22 00
3 x 3 and 3 x 4 in.; 18 and 20 ft.	23 00
3 x 3 and 3 x 4 in.; 22 and 24 ft.	24 00
3 x 3 and 3 x 4 in.; 26 to 32 ft.	26 00
6 x 6, 6 x 8, 8 x 8 in.; 6 to 16 ft.	24 00
6 x 6, 6 x 8, 8 x 8 in.; 18 and 20 ft.	24 50
6 x 6, 6 x 8, 8 x 8 in.; 22 and 24 ft.	25 00
6 x 6, 6 x 8, 8 x 8 in.; 26 to 32 ft.	25 50

FLOORING

Nos. 1 and 2, 1 x 3 in., E. G.	32 00
Nos. 1 and 2, 1 x 4 in., E. G.	31 00
Nos. 1 and 2, 1 x 6 in., E. G.	29 00
Nos. 1 and 2, 1 x 4 in., or 6 in., F. G.	23 00
No. 3, 1 x 4 in. or 6 in.	20 00

No. 3 Edge grain $3.00 per M. extra.

SHIPLAP

B. C. Fir, 6 in.	19 00
B. C. Fir, 8, 10, 12 in.; 8 to 16 ft.	20 00
No. 2 Shiplap, 6 in.	19 00
No. 2 Shiplap, 8, 10 and 12 in.	20 00

FIR, COMMON BOARDS, S 1 S, 8 to 16 Ft.

Mixed widths (may contain 30 per cent. 4 and 6 in.)	19 00
Common Boards, 8 to 12 in.	20 00
No. 2 Mixed widths	17 00
No. 2 Boards, 8 to 12 in.	18 00

SHINGLES

XXX B. C. Cedar	2 75

LATH

Fir lath, 3/8 x 1 3/8 in. x 4 ft., bundled in 50's	4 00
Cedar lath 3/8 x 1 3/8 in. x 4 ft.	4 50

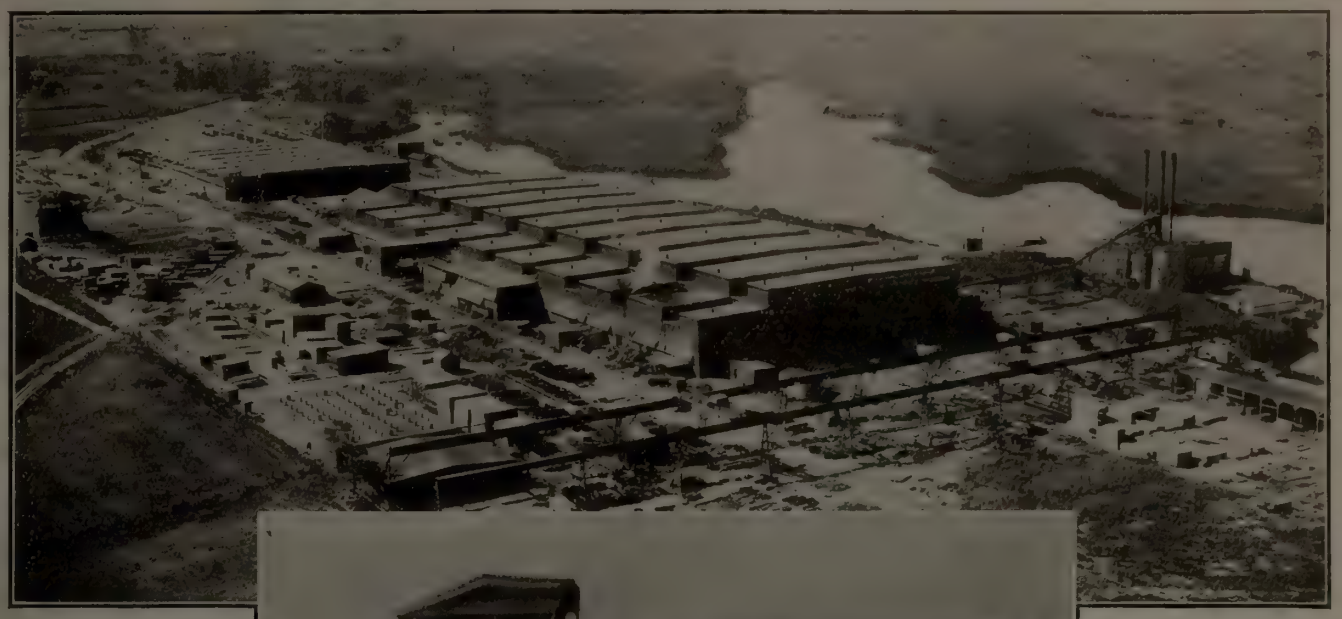
BUFFALO AND TONAWANDA, N.Y.

White Pine

Wholesale Selling Price

Uppers 4/4	$94 00
Uppers 5/4 to 8/4	92 00
Uppers 10/4 to 12/4	97 00
Selects 4/4	84 00
Selects 5/4 to 8/4	82 00
Selects 10/4 to 12/4	92 00
Fine common 4/4	61 00
Fine Common 5/4	65 00
Fine common 6/4	65 00
Fine common 8/4	67 00
No. 1 Cuts 4/4	51 00
No. 1 Cuts 5/4	57 00
No. 1 Cuts 6/4	59 00
No. 1 Cuts 8/4	61 00
No. 2 Cuts 4/4	32 00
No. 2 Cuts 5/4	43 00
No. 2 Cuts 6/4	45 00
No. 2 Cuts 8/4	50 00
No. 3 Cuts 5/4	33 00
No. 3 Cuts 6/4	34 00
No. 3 Cuts 8/4	36 00
Dressing 5/4	46 00
Dressing 5/4 x 10	51 00
Dressing 5/4 x 12	52 00
No. 1 Moulding 5/4	58 00
No. 1 Moulding 6/4	58 00

(Continued on page 54)



The Plant Behind the National Motor Truck

The Largest Makers of Motor Trucks in Canada

NATIONAL MOTOR TRUCKS

THE surest Test of any Motor Truck is its daily performance under usual loads and conditions. That is the test we invite for the National Motor Truck. Competent engineers, with years of experience behind them have designed the National Truck. Improvements that would take place in the natural course of events during the next few years, have been anticipated and incorporated into the construction of the National Truck. A glance through the specifications will emphasize the thoroughness with which this Truck is built.

Every Motor Truck owner or prospective buyer should see the National Truck before purchasing.

Write to our Hamilton Office for illustrations and full particulars.

Specifications in Brief

MOTOR—the famous Waukesha

TRANSMISSION
Our own design. 2 and 3½ ton Models, 4 speeds forward and a reverse. Transmission is placed midway between rear axle and motor.

CLUTCH
Enclosed dry-plate variety.

IGNITION
Dixie Bosch or Eiseman, high tension. Independent.

CARBURETOR—Zenith

RADIATOR
On both 2 and 3½ ton models, is of built-up type, having cast top, bottom and sides, enclosing fin and tube centre core

STEERING GEAR
Is of the Worm and Nut, fore and aft type.

FRONT AXLE—Timken
2 x 3 in. I-beam section.

REAR AXLE
Is the well-known Timken, David Brown worm drive.

SPRINGS
Are semi-elliptic front and rear, and are of silico-manganese steel, self lubricated.

WHEELS
Best oak of artillery design with squared spokes, 14 to the wheel. Front wheels 36 x 5, rear, 40 x 5, dual.

TYRES
36 x 5 in. front. 40 x 5 in. dual, rear. Solid rubber and demountable rims.

FRAMES
High carbon, open hearth ship channel. Cardan shaft is tubular, made from seamless, drawn steel tubing of .35 carbon steel, heat-treated.

EQUIPMENT
Three Adlake pressed steel truck lamps, jack and a full set of tools.

The National Steel Car Co., Limited

Operating Offices and Works, Hamilton, Canada

Sales Offices: — Montreal — London, England — Paris, France

CURRENT LUMBER PRICES — Continued

No. 1 Moulding 8/4			58 00
No. 2 Moulding 5/4			47 00
No. 2 Moulding 6/4			47 00
No. 2 Moulding 8/4			47 00
No. 1 Barn 1 x 12			48 00
No. 1 Barn 1 x 6 and 8			34 00
No. 1 Barn 1 x 10			36 00
No. 2 Barn 1 x 6 and 8			32 00
No. 2 Barn 1 x 10			34 00
No. 3 Barn 1 x 6 and 8			26 00
No. 3 Barn 1 x 10			27 00
Box 1 x 6 and up			23 00
Box 1 x 10			25 00
Box 1 x 12			26 00
Box 1 x 13 and up			30 00

The following quotations on hardwoods represent the jobber buying price at Buffalo and Tonawanda:

MAPLE

	1s & 2s	No. 1 Com.	No. 2 Com.
4/4	29 - 31	19 - 21	13 - 15
5/4 to 8/4	32 - 34	21 - 23	13 - 14
10/4 to 16/4	36 - 38	26 - 28	18 - 20

RED BIRCH

4/4	42 - 44	26 - 28	14 - 16
5/4 to 8/4	44 - 46	28 - 30	16 - 18

SAP BIRCH

4/4	34 - 36	22 - 24	16 - 18
5/4 and up	36 - 38	24 - 26	16 - 18

SOFT ELM

4/4	34 - 36	23 - 25	14 - 16
5, 6 & 8/4	36 - 38	25 - 27	16 - 18

BASSWOOD

4/4	32 - 34	23 - 25	15 - 17
Thicker	34 - 36	25 - 28	18 - 19

PLAIN OAK

4/4	50 - 52	31 - 33	19 - 21
5/4 to 8/4	52 - 54	33 - 35	21 - 23

ASH, WHITE AND BROWN

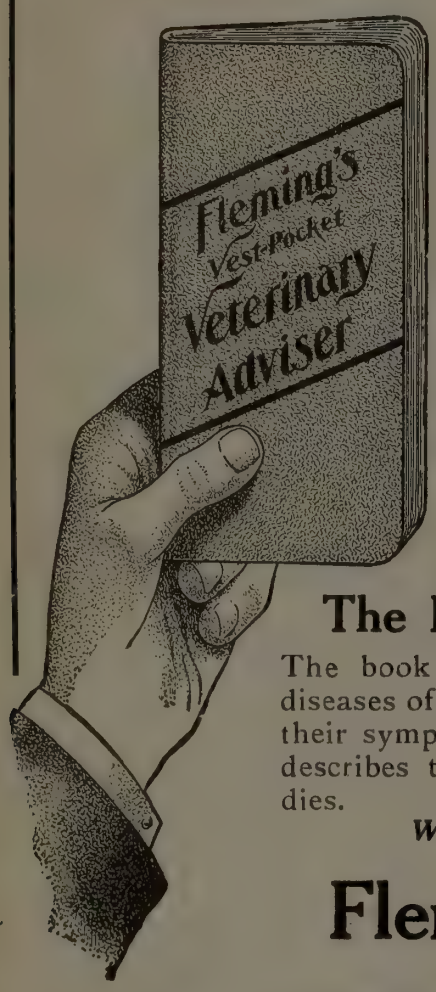
4/4	44 - 46	26 - 28	17 - 19
5/4 to 8/4	51 - 53	28 - 30	18 - 20
10/4 and up	60 - 62	40 - 42	20 - 22

BOSTON, MASS.

White pine uppers, 1 to 2 in.	92 00	98 00
Selects, 1 to 2 inch	80 00	88 00
Fine common, 1 in.	68 00	70 00
Fine common, 1¼ to 2 in.	70 00	72 00
No. 1 Cuts 1 in.		55 00
No. 1 Cuts 1¼ to 2 in.	60 00	64 00
No. 2 Cuts, 1 in.		40 00
No. 2 Cuts, 1¼ to 2 in.	48 00	50 00
Barn Boards, No. 1, 1 x 12	46 00	50 00
No. 1, 1 x 10	37 00	38 00
No. 1, 1 x 8	36 00	37 00
No. 2, 1 x 12	36 00	40 00
No. 2, 1 x 10	34 00	35 00
No. 2, 1 x 8	33 00	34 00
No. 3, 1 x 12	31 00	32 00
No. 3, 1 x 10	29 00	30 00
No. 3, 1 x 8	28 00	29 00
Canadian spruce boards	23 00	25 00
Spruce, 10 in. dimension	24 00	25 00
Spruce, 12 in. dimension	25 00	26 50
Spruce, 9 in.		23 50
Spruce, 8 in. and under dimen.	22 50	23 00
10 and 12 in. random lengths, 10 ft. and up		24 00
2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 7 and 3 x 4 random lengths, 10 feet and up	19 50	21 00
All other random lengths, 7-in. and under, 10 ft. and up	19 50	20 00
5-inch and up merchantable boards, 8 ft. and up, p 1s	20 00	21 00
1 x 2 and 1 x 3 furring, p 1s clipped and bundled	21 00	22
1⅝-in. spruce laths	4 10	4 20
1½-in. spruce laths	3 55	3 75

New Brunswick Cedar Shingles

Extras	3 20	3 40
Clears	2 60	2 90
Second clears	2 40	2 60
Clear whites	2 25	2 30
Extra 1s (Clear whites in)		1 60
Extra 1s (Clear whites out)		1 50
Red Cedar Extras, 16-in. 5 butts to 2-in.	3 45	3 50
Red Cedar Eurekas, 18-inch 5 butts to 2-in.		4 25
Red Clear Perfection, 5 butts to 2¾		4 80
Washington 16-in. 5 butts to 2-in. extra red clear	3 25	3 30



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The book deals fully with all the diseases of horses and cattle, outlines their symptoms and causes. It also describes the uses of Fleming remedies.

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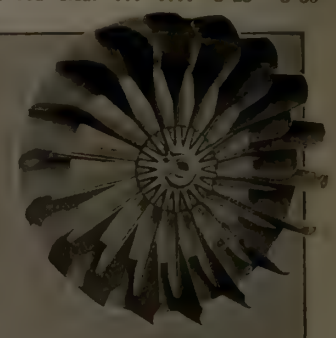

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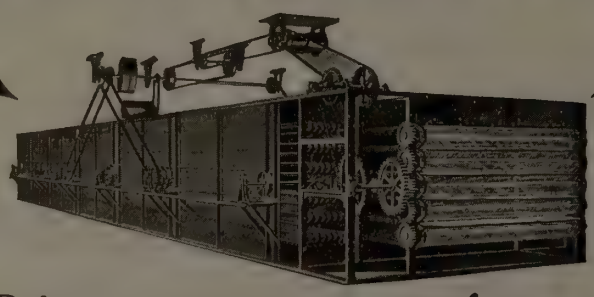
PROCTOR VENEER DRYER



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Superior in Design, Workmanship, Quality
High Carbon Steel Pins.
Patterns Full Weight—Full Strength

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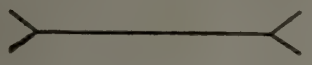
This Trademark  *on every link.*

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Aloxite Saw Gumming Wheels

Are making such records as this—giving such real saw-gumming results. They cut fast, and clean—hold their shape—show long life, and they cut cool without case-hardening the saw.

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Webster & Bro., James

HARDWOOD FLOORING
Canada Wood Specialty Company
Wilson Bros.

HEMLOCK
Anderson Lumber Company, C. G.
Bartram Bros.
Bourgouin, H.
Graves, Bigwood & Company
Haeberle Lumber Company
Hocken Lumber Company
McGibbon Lumber Company
Mason, Gordon & Company
Spears & Lauder
Spencer, C. A.
The Long Lumber Company

HOSE
Can. H. W. Johns-Manville Co., Ltd.
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

HARDWOOD VENEER DOORS
Wilson Bros.

INTERIOR FINISH
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Gates Lumber Company
Southern Lumber Company
Stout Lumber Company
Valley Lumber Company
Wilson Bros.
Wisconsin & Arkansas Lumber Co.

KNIVES
Disston & Sons, Henry
Peter Hay Knife Company
Simonds Canada Saw Company

LATH
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Austin & Nicholson
Bartram Bros.
Beck Mfg. Company, C.
Christy-Moir Company
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Fraser Limited
Fraser-Bryson Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Gates Lumber Company
Georgian Bay Lumber Company
Harris Tie & Timber Company
Graves, Bigwood & Company
McGibbon Lumber Company
New Ontario Colonization Company
River Ouelle Pulp & Paper Co.
Southern Lumber Company
Stout Lumber Company
Spencer, C. A.
Valley Lumber Company
Victoria Harbor Lumber Company
Wisconsin & Arkansas Lumber Co.

LAUNCHES
Adams Launch & Engine Company

LOCOMOTIVES
Canadian Locomotive Company
Climax Manufacturing Company
Montreal Locomotive Works

LOCOMOTIVE CRANES
Canadian Link-Belt Company

LOGGING CARS
National Steel Car Company

LOGGING CHAINS
Columbus Chain Company

LOGGING & MACHINERY EQUIPMENT
Boving Hydraulic & Engineering Co.
Ryther & Pringle Company
Waterous Engine Works Company

LUMBER
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Auger & Son Limited
Austin & Nicholson
Canada Wood Specialty Company
Cotton Belt Lumber Company
Dudley, A. N.
Eagle Lumber Company
Fassett Lumber Company
Fesserton Timber Company
Garrett Lumber Company, T. H.
Georgian Bay Lumber Company
Goodday, H. R.
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Gates Lumber Company
Harris Tie & Timber Company
Harrison & Sons, John
Hettler Lumber Co., Herman H.
Harquail Company, Ltd., J. & D. A.
Laidlaw Lumber Company, R.
McLennan Lumber Company
Montreal Lumber Company
Murphy & Company, J. J.
Newman, John P.
New Ontario Colonization Company
Oliver Lumber Company
Parry Sound Lumber Company
Riordon Pulp & Paper Co., Ltd.
River Ouelle Pulp & Lumber Co.
Savoie & Company
South Coast & Northern Lumber Co., Incorporated
Southern Lumber Company
Stout Lumber Company
Trout Creek Lumber Company
Union Lumber Company, Limited
Valley Lumber Company
Victoria Harbor Lumber Company
Wilson Bros.
Wisconsin & Arkansas Lumber Co.

LUMBER INSURANCE
Lumber Insurers' General Agency

LUMBER MEASURING REGISTER
Jas. Morrison Brass Mfg. Company

LUMBER TRUCKS
Norman S. Knox

MOTOR TRUCKS
National Steel Car Company
Packard Motor Car Company

NORTHERN PINE
Anderson Lumber Company, C. G.
Auger & Son
Beck Manufacturing Company, C.
Blair & Rolland
Bourgouin, H.
Cleveland-Sarnia Sawmills Company
Donogh & Company, John
Eagle Lumber Company
Fesserton Timber Company
Forest Mills of B. C., Limited
Fraser-Bryson Lumber Company
Gordon & Company, George
Gillies Bros. Limited
Graves, Bigwood Company
Harris Tie & Timber Company
Hettler Lumber Co., Herman H.
Hocken Lumber Company
Long Lumber Company
Mackarell & Company, Thos.
Mason, Gordon & Company
Quebec & St. Maurice Industrial Co.
Spencer, C. A.
St. Gabriel Sumber Company
Watson & Todd, Limited

OATS
National Elevator Company

PACKINGS
Can. H. W. Johns-Manville Co., Ltd.
Garlock Packing Company
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

PATENTS
Harold C. Shipman & Company

PLANING MILL EXHAUSTERS
Sturtevant Company, B. F.

PLANING MILL MACHINERY
Canadian Blower & Forge Company

POLES
Harris Tie & Timber Company
Pink & Company, Thos.

PORTABLE HOUSES
Geo. M. Mason Limited

(Continued on page 69)

The Power of "A Want Ad."

When you have something to sell that another is likely to want, or if you want something, a sure way to get in touch with your party is through a "want ad." This class of advertising the world over is a rapid and positive means of finding your man.

If you have any wants in the lumber business the quickest and most inexpensive way to satisfy them is by advertising in the **Wanted and For Sale Department** of the Canada Lumberman and Woodworker.

Twice a month "the paper with the green cover" brings together buyers and sellers of lumber and machinery from all the principal lumbering centres of Canada and the United States. By covering this wide though specialized field, waste circulation for advertisers has been eliminated.

For quick and satisfactory results, get your advertisement in the **Wanted and For Sale Department** of the

Canada Lumberman & Wood Worker

Published 1st and 15th of the Month

The National Lumber Journal of Canada

TORONTO - - - CANADA

Branch Offices:

Montreal Winnipeg Vancouver London, Eng.

United States Representatives:

W. D. Ward, 1226 Tribune Building, NEW YORK.

E. I. Macintyre, 1413 Great Northern Bldg., CHICAGO.

Weatherbeaton Over Ten Years

The story the other fellow tells about Neptune Waterproof Leather Belting is even stronger than ours. Just read the following voluntary letter:—

Madera, California, June 7, 1911.

"For the past seven years we have had in continuous use one of your 12-in. double "Neptune" Belts on our hog. This belt has been, and is still running in the open, and is exposed to all rain, fog, hot sun, and any and all kinds of weather, and is still a good belt, and in good condition."

Madera Sugar Pine Company,
A. P. Froom, Foreman.

WESTERN UNION TELEGRAM
May Sixteenth, 1914

"Madera Sugar Pine twelve inch Neptune still running and giving good service."

There you have it—unmistakable proof of the absolute waterproof quality of Neptune Leather Belting. Make your next order a Neptune Order—send it in to any of our Branches—large stock of belting at each one; prompt delivery guaranteed.

The Graton & Knight Mfg. Co.

Oak Leather Tanners and Belt Makers
Worcester Mass., U. S. A.

Representatives in Canada:

The Canadian Fairbanks-Morse Co., Limited

St. John, Quebec, Montreal, Ottawa, Toronto, Hamilton, Vancouver, Victoria

Not altogether what we say but what users say

"We have used the Alligator or Warping Tug manufactured by you for the last 7 or 8 years, and consider them indispensable to lumbermen on waters of French River or similar streams."

Will move a bag containing 60,000 logs, in calm weather, 30,000 in a head wind.

West & Peachey - Simcoe, Ont.

We make a Specialty of

Conveyor Chains

For Lumbermen

WE make them from carefully-selected iron, and every link is guaranteed ***strictly hand-made***—not the inferior machine-made.

The point is worthy of special emphasis.

We make the chains according to any dimensions desired, guarantee splendid workmanship; uniformity; dependability.

Prices are the lowest possible for the class of work we furnish, and Quality above criticism.

Let us quote for your needs.

Send for catalogue giving estimated weights of various sizes of chain; prove test; breaking, straining and safe-working loads, and giving hints regarding the care of chain which will prolong a chain's usefulness.

Woodhouse Chain Works

P.O. Box 525 TRENTON, N.J.

Listen, Lumbermen! —

We make just the kind of gloves you need in your work.

ASBESTOL
REG. IN U.S. PAT. OFF.

EISENDRATH'S CELEBRATED HORSE HIDE

Gloves and Mittens

are making good in every lumber camp in Canada and the States. They are strongly constructed, and will wash out soft and pliable after being subjected to the tests of heat, steam and water. Be sure the diamond-shaped "Asbestol" trademark is on every pair you buy.

Dealers and Commissaries: Keep your "Asbestol" stock in good trim. Order from your wholesaler now and then, and ask for glove rack which we will furnish you free for purposes of display.

Eisendrath Glove Company

2001 Elston Ave. Made in U.S.A. **CHICAGO, ILL.**

Canadian Made Locomotives

There is no need to go outside of the Canadian market in order to obtain the best logging locomotives. We have been specializing in this line for fifty years. You will find the design of our locomotives complete and the sturdy construction equal to every test of the severe service of logging operations.

Repair parts can always be had on the shortest notice.

This engine is 13½ ins. x 18 ins. and weighs 35 tons.

Grey Iron Castings—any size or shape—ordinary or intricate—made promptly. New foundry, splendidly equipped We would be pleased to quote on castings—singly or by contract. We also make drop forgings of all descriptions.

MAY WE SEND YOU SPECIFICATIONS?

Canadian Locomotive Company, Limited, Kingston, Ont.

Taylor and Arnold Ltd., Sales Agent, Montreal and Winnipeg

J. J. TURNER & SONS

PETERBOROUGH, ONT.

Government Contractors and the largest Manufacturers and Dealers in Canada of

Lumbermen's Tents, Bed Ticks, Grey Blankets, Nose Bags, Waterproof Goods, Steel Ranges and General Camp Outfits.

Write for Catalogue. **Prompt shipments.**

DETACHABLE

Lumber Trucks

For SAWMILLS, PLANING MILLS and LUMBER YARDS

Write for catalogue and prices.

Norman S. Knox

47 Wellington Street East **TORONTO**

LOGGING LOCOMOTIVES

The designs of our Logging locomotives are the result of wide experience, extending over a period of 80 years.

The material used in their construction is thoroughly tested and is the best of its kind.

All details are accurately finished to standard gauges and are absolutely interchangeable on all locomotives of the same class and size.

This cuts out long delays at critical times of the work, as parts liable to wear can be kept on hand or shipped promptly from our works.

MONTREAL LOCOMOTIVE WORKS, LIMITED,

DOMINION EXPRESS BUILDING, MONTREAL, CANADA.

CLIMAX Improved Geared LOCOMOTIVES FOR WOOD AND IRON RAILS

A 62-ton Climax Locomotive Designed Especially for Heavy Logging Work.

Climax Locomotives are successfully operated on steep grades and sharp curves. Any weight or gauge. Locomotives in stock for immediate shipment. **Get Catalog "H."**

CLIMAX MANUFACTURING CO., 313 W. Main Street, CORRY, PA.
VANCOUVER MACHINERY DEPOT, LTD., VANCOUVER, B.C.

If You Need a Position

a classified advertisement in the **Canada Lumberman and Woodworker** will find one for you.

If You are a Capable Man

no matter how small or how big your present position may be, an advertisement in **this paper** will put you in touch with every existing possibility.
The rates are most reasonable, write us.

Canada Lumberman and Woodworker, Toronto

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Perrin & Company, W. R.

PULLEYS & SHAFTING
Boving Hydraulic & Engineering Co.
Dodge Mfg. Company, Limited
Waterous Engine Works Company

PULP MILL MACHINERY
Boving Hydraulic & Engineering Co.

PUMPS
Smart-Turner Machine Company
Waterous Engine Works Company

RAILS
Gartshore, John J.

ROOFING
Can. H. W. Johns-Manville Co., Ltd.
Turner Bros. Canada, Limited

RUBBER GOODS
Gutta Percha & Rubber Company
Turner Brothers Canada, Limited

SASH
Batts Limited
Haeberle Lumber Company

SAWS
Atkins & Company, E. C.
Disston & Sons, Henry
Hoe & Company, R.
Shurly-Dietrich Company
Simonds Canada Saw Company

SAW SHARPENERS
Rogers & Company, Samuel C.

SAW MILL MACHINERY
Berlin Machine Works
Huther Bros. Saw Mfg. Company
Long Manufacturing Company, E
McLennan Foundry & Mach. Works
Parry Sound Lumber Company
Payette & Company, P.
Smith Foundry Company
Waterous Engine Company

SHINGLES
Bartram Brothers
Campbell-MacLaurin Lumber Co.
Can. H. W. Johns-Manville Co., Ltd.
Christy-Moir Company
Fraser Limited
Gillespie, James
Harris Tie & Timber Company
Larkin Lumber Company, C. A.
Long Lumber Company
McGibbon Lumber Company
North Shore Shingle Association
Timms, Phillips & Company

SILENT CHAIN DRIVES
Canadian Link-Belt Company

SHINGLE & LATH MACHINERY
Dunbar Engine & Foundry Co.
Long Manufacturing Company, E
Payette & Company, P.
Waterous Engine Works Company

SNOW PLOWS
Bateman-Wilkinson Company
Pink Company, Thos.

SOUTHERN PINE
Arkansas Land & Lumber Company
Arkansas Lumber Company
Arkansas Soft Pine Bureau
Cameron & Company
Cotton Belt Lumber Company
Crossett Lumber Company
Eagle Lumber Company
Edgar Lumber Company
Freeman-Smith Lumber Company
Fordyce Lumber Company
Garrett Lumber Company, T. H.
Gates Lumber Company
Hobart & Company
Mason, Gordon & Company
Southern Lumber Company
Stout Lumber Company
Valley Lumber Company
Wilson Lumber Company
Wisconsin & Arkansas Lumber Co.
Wuichet, Louis

SPRUCE
Auger & Son
Bartram Bros.
Blair & Rolland
Bourgouin, H.
Brown Corporation
Canada Lumber Sales Company
Christy-Moir Company
Donogh & Company, John
Fenderson & Company, John
Fraser Limited
Fraser-Bryson Lumber Company
Gillies Bros.
Grant & Campbell
Mackarell & Company, Thos.
Mason, Gordon & Company
New Ontario Colonization Company
Quebec & St. Maurice Industrial Co.
Rideau Lumber Company
Spencer, C. A.
St. Gabriel Lumber Company

STEEL BARRELS
Smart-Turner Machine Co.

STEEL CHAIN
Canadian Link-Belt Company
Columbus Chain Company
McKinnon Chain Company
Standard Chain Company
Waterous Engine Works Co.

STEEL DRUMS
Smart-Turner Machine Co.

STOVES
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STOKERS
Jones Underfeed Stoker Company

TAPS and DIES
Pratt & Whitney Company
Waterous Engine Works Company

TIES
Fesserton Lumber Company
Harris Tie & Timber Company
Spears & Lauder

TIMBER BROKERS
Cant & Kemp
Farnworth & Jardine
Lacey & Company, Jas. D.
Meier, F. R.
Smith & Tyrer Limited

TIMBER ESTIMATORS
Meier, F. R.
Sewall, James W.

TIMBER CRUISERS
Campbell Lumber Company, L. E.

TRANSMISSION MACHINERY
Canadian Link-Belt Company

TUGS
West & Peachey

VENEERS
Hoffman Brothers Company
Webster & Bro., James

VENEER MACHINERY
Perrin, William R.
Philadelphia Textile Machinery Co.

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Douglas & Company
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WATER WHEELS
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Canadian Blower & Forge Company
Long Manufacturing Company, E.
Waterous Engine Works

WOOD PULP
New Ontario Colonization Co.
River Ouelle Pulp & Lumber Co.
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A Sure Way To Increase Your Profits

Use the best Saws. We guarantee that ATKINS STERLING CROSS CUT SAWS will cut twenty-five per cent more timber than any other Saw with less cost for re-fitting. We not only claim this—WE GUARANTEE IT—and we'll make our Guarantee good.

Write to the nearest address below—say *"I want to know about your proposition in the Canada Lumberman."*
No obligation. Just write us if you want to increase your profits.

ATKINS NO. 5 PERFECTION

ATKINS NO. 69 EUREKA

Two of our most popular patterns. We make others. Let us show them to you.

Write to-day to

E. C. ATKINS & CO.

Makers of Sterling Saws

Factory—HAMILTON, Ont. ***VANCOUVER BRANCH—109 Powell St.***

United States Factory—Indianapolis, Ind.

HIGH QUALITY FOOD

is essential to the working energy of your lumber jacks. It is our pride that all products leaving our mills are inspected to see that only the highest quality is shipped.

Tillson's Rolled Oats

Rainbow Flour—Top Patent Manitoba.

Goldie's Star—Famous Blended Flour.

Lily Flour—For Pies and Pastry.

Split Peas, Pot Barley and White Beans, Bran, Shorts and Western Feed Oats.

GUARANTEED ABSOLUTELY PURE

Canadian Cereal and Flour Mills Co., Ltd.

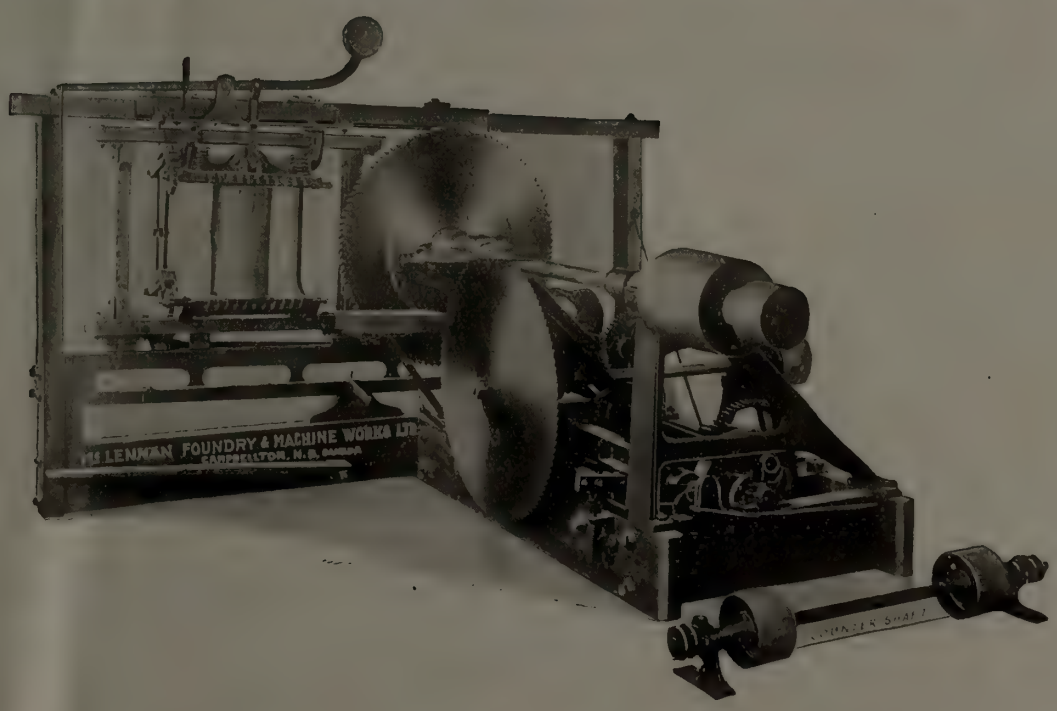
TORONTO - - - - - CANADA

McLennan's Improved Shingle Machine

Substantially Built

Everything Necessary

Nothing Superfluous



Floor Space
8 feet x 8 feet

Capacity
17 to 22 Thousand
Per 10 Hours

McLennan Foundry & Machine Works

Limited

Campbellton, N. B.

This mark on your saw mill machinery is an indication that your lumber manufacturing equipment is the best and most economical money can buy.

Steam Feeds

The illustration gives a good general idea of our direct acting, or shot gun, steam feed, which we build in the following sizes: 8 in., 10 in., 11 in., 12 in. and 14 in. bore.

The cylinders are made in 6-foot sections, and are bored to exact diameter. The flanges on cylinders are faced perfectly true, and finished to templets, so that each section is interchangeable. The flanges are also turned on the outside, which is a great convenience for levelling or lining the feed, when placing same in mill. For each end of the completed cylinder we furnish short pipes, which are long enough to reach the valves and permit the valve connections and steam feed to nicely clear the floor timbers.

The front cylinder head is our improved pattern.

The piston rod is made from double thickness, seamless steel tubing, of extra large diameter. It is made in two or more sections, according to length of feed.

Our illustrated catalogue contains full details. A copy will be sent you on request.

E. Long Mfg. Co., Limited

Orillia, Ontario

Agencies:

MONTREAL . - - - -	Williams & Wilson, Limited
WINNIPEG - - - - -	Stuart Machinery Co., Limited
EDMONTON and CALGARY	Gorman, Clancey & Grindley, Ltd.
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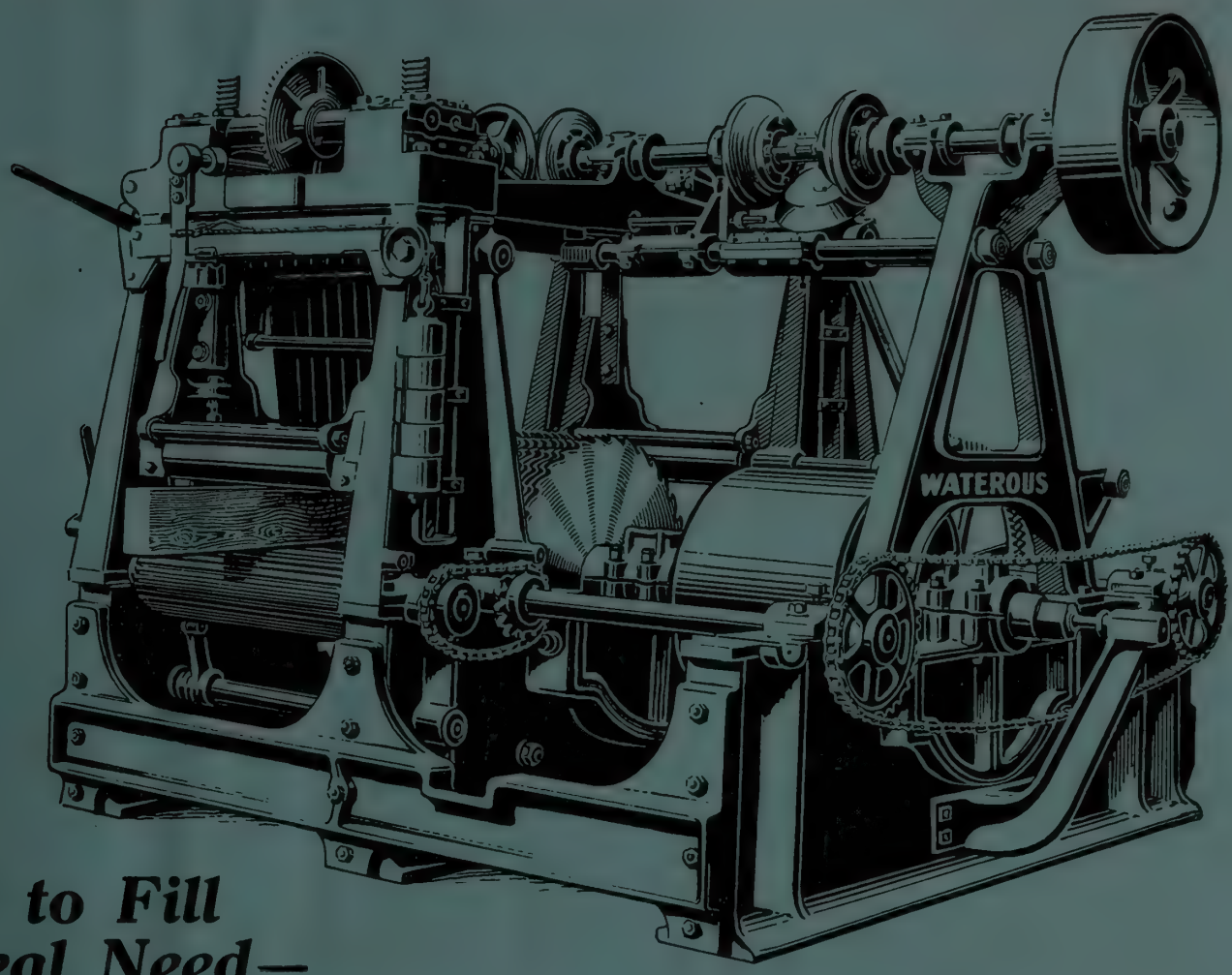

Built to Fill A Real Need—

The "1916 Model" Kendall Circular Gang

Ten years have made a big difference in Canadian sawmill conditions. You may be handling just as many logs through your mill as you were then, but the chances are your daily production of finished lumber is dropping off.

It's because logs are getting smaller. And that's why every wide awake lumberman in Canada is looking for a better, quicker way to turn small logs into merchantable lumber.

The Kendall Circular Gang meets this demand.

It takes cants from 4″ to 12″ thick and at the rate of 2500 to 3000 a day turns them into lumber, perfect in finish and cut evenly from end to end.

This feature—the rapid production of perfect lumber—distinguishes the Kendall Gang. It is a reputation well earned by the machines of this type already in operation.

The "1916 Model" machine is the latest development of the Kendall patents. It has features that mean increase in capacity, cutting ability, safety and convenience.

Let us show you why it will reduce lumber production costs for you.

The Waterous Engine Works Co., Limited

Brantford Canada

Branch—Winnipeg, Man. Agency—H. B. Gilmour, Vancouver, B.C.

A Letter

"We have sawn as many as 2,500 logs in 10 hours, and if we could keep the Gang running without any stops or delays we could run 3,000 through it in 10 hours. But taking into account delays, changing saws, etc., we can easily saw over 2,000 cants per day. We run five logs per minute, which is about 65 to 75 feet feed per minute. It does not make any difference what sized cant we run, the feed is the same. We run 11-in. cants when our saws are full size and only 10-in. after the saws are worn down too much to take 11-in. cants.

We have been well satisfied with our Circular Gang and would certainly advise any person requiring a machine which puts out a lot of lumber, to install one. This Gang does not only cut up a lot of lumber, but it cuts it even from end to end without any variation in thickness, which no Band Saw will do, neither any Circular Saw."

(Name on request)

$5,000,000.00
worth of mixed metal sold annually.

"FROST KING" METAL

Our thirty-five years experience in metal mixing enables us to place on the market a babbitt that we believe to be absolutely perfect. For high speed machinery and engine work it is without an equal. It is specially designed for saw-mills, planing mills, threshing engines, traction engines, pumps, rolling mills, pulp machinery, and all classes of stationary engines. It is a high grade metal made of the very best selected stock, and carefully compounded.

If your dealer does not stock FROST KING send us a money order for your requirements. **Price 30c per lb.**, Fort William and East; West of Fort William **35c per lb.**, delivered nearest railway station; packed in 30 lb. and 60 lb. boxes.

For extra duty, such as over-hanging saws, our FAULTLESS BABBITT will stand where all other metals will fail. Price, Fort William and East, **40c per lb.**; West of Fort William, **45c**, delivered to your nearest railway station; packed in 30 lb. and 60 lb. boxes.

HOYT METAL CO., Toronto, Canada

Have factory and office at Eastern Avenue and Lewis Street, Toronto, Canada

Factories also at:— New York, N. Y. London, Eng. St. Louis, Mo.

Planing Mill Improvements

Every Manufacturer in the Lumber Industry realizes that to be "up-to-date" their Factory should be installed with **Shaving Exhaust Fans.**

The Sheldon Shaving Exhaust Fan
is especially designed to suit your particular requirements, giving greater efficiency and independence than any other on the market.

See our New Catalogue

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Toronto Office, 609 Kent Building

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General Mill Supplies MONTREAL

AJAX
Loading Chain

is the loading chain that 90% of all the lumbermen in United States and Canada use and swear by. Do you?

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Winnipeg
Bissett and Webb